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Entrepreneurship and bribery in a transition economy

Tú, Phan Anh

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ENTREPRENEURSHIP AND BRIBERY IN A TRANSITION ECONOMY

Theory and firm-level evidence in Vietnam

Phan Anh Tú

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RIJKSUNIVERSITEIT GRONINGEN

**ENTREPRENEURSHIP AND BRIBERY IN
A TRANSITION ECONOMY**

Theory and firm-level evidence in Vietnam

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Con kính tặng Ba Mẹ, vợ và con trai.
To my parents, my wife and my son.

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July, 2012

Groningen / CanTho

Phan Anh Tu

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Chapter 1

Introduction

“Corruption is the single greatest obstacle to economic and social development.”
—The World Bank, 1997

1.1 Introduction

Corruption is not a new topic, but it has increasingly become a central policy issue around the world. It is considered a significant source of corrosive effects that sabotages the stability of societies, threatens democratic and moral values, and hampers economic development (Mauro, 1995). Virtually all countries consider corruption a criminal act, and many international organizations have attempted to limit corruption (Spicer et al., 2004). Many countries have launched periodic spring cleaning through anticorruption campaigns. Nonetheless, corruption persists (Bogmans & de Jong, 2011; Ramdani & van Witteloostuijn, 2009; Johnson et al., 2000). According to Transparency International’s (2005) survey, corruption is considered rampant in more than 70 countries. The World Bank claims that corruption costs \$1 trillion each year (Kaufmann, 2005). Of the 6000 people surveyed in the Democratic Republic of Congo, Malawi, Mozambique, South Africa, Zambia, and Zimbabwe, 56% report that they were asked to pay bribes in the past year, according to Transparency International’s survey conducted between 2010 and 2011.

In line with the increased attention in the economic policy arena, corruption has considerably consumed the ink and papers of academic research. As a result, there are well-

established theories that explain the rise and fall of corruption (see Bardhan, 1997, for an extensive review of the literature). In the extant literature, researchers have attempted to explain bribery from the perspective of society at large. Sociologists, for example, hold that the roots of corruption are cultural. Economists focus on the lack of transparent institutions or poor quality of public services as causes of corruption (Treisman, 2000; Wu, 2009).

Although the (empirical) literature on corruption and economic performance at the country level has been relatively well developed, the relationship between bribery and performance at the firm level is underaddressed. Such a firm-level perspective may be worthwhile, as it allows for new questions related to the antecedents and implications of corruption at the firm level. For example, what is the relationship between corruption and entrepreneurial activities? Why are some entrepreneurs more likely to pay bribes than others? Can variations in bribery explain variations in organizational performance? Answering these questions may provide a significant contribution to the extant literature and introduce a perspective on bribery that complements the existing macro perspectives. Moreover, particularly because of the complex relationship between entrepreneurial activity and large-scale institutional change, questions taking a more micro perspective on the relationship between firm behavior and corruption are typically relevant for transition economies. Despite substantial progress in corruption research, it is not yet fully understood why firms in a transition economy may be willing to pay bribes and how bribes are related to their performance. Consequently, transition economies offer an appropriate research context for a study of entrepreneurship and bribery.

1.2 Research aim and questions

The aim of this thesis is to complement existing corruption research and increase understanding of the determinants and consequences of firm-level corruption in the particular

context of a transition economy. A firm-level perspective on corruption in a transition economy is important because in a transition economy, an organization is often the basic unit of corruptive practice (cf. Luo, 2004). The relationships between firm-level corruption, its antecedents, and its implications for firm performance are the subjects of study in this thesis. The main research questions are twofold: (1) What are the determinants of firm-level bribery? and (2) What is the relationship between bribery and entrepreneurial performance?

The more specific purposes of this thesis are the following. Its first aim is to investigate whether there is a relationship between firm characteristics, firm context, and bribery incidence. Firm characteristics (Clarke & Xu, 2004; Svensson, 2003; Wu, 2009) may influence the willingness to pay bribes due to specific forces created by organizational traits (Clarke & Xu, 2004; Svensson, 2003; Wu, 2009). Within-firm characteristics may create conditions of force or need, thus stimulating predisposition for corporate illegality such as bribery (Baucus, 1994; Baucus & Near, 1991). For example, it is more likely that large firms would pay bribes because they face more forces due to organizational complexity. In addition, the business context may explain firms' engagement in bribery (cf. Martin et al., 2007). For example, (perceived) competitive environments may present external forces for organizations to bribe. Although firm-level bribery has been empirically investigated (Chen et al., 2008; Clarke & Xu, 2004), little is known about the impact of organizational characteristics (internal force) and contextual conditions (external force) on its likelihood. Therefore, the first aim of this study is to understand whether and, if so, how variations in firm and context characteristics determine the variation in firm-level bribery in a transition economy.

The second aim of the thesis is to study whether there is a relationship between personal networks of entrepreneurs and bribery. Although research has acknowledged entrepreneurs'

bribe payments (Aidis & van Praag, 2007), little is known about the effects of personal networks on firm-level bribe behavior in general. Firms (in a transition economy) do not operate in a vacuum; they are embedded in networks of personal relationships, and these networks' characteristics could determine the likelihood for transition economy firms to engage in bribery. The network of personal relationships is important because it can promote actions, create opportunities for the network members, and thereby generate value (Adler & Kwon, 2002; Yli-Renko et al., 2001). Therefore, the second main purpose of this thesis is to investigate whether and how personal relationships determine the likelihood of firm-level bribery in a transition economy.

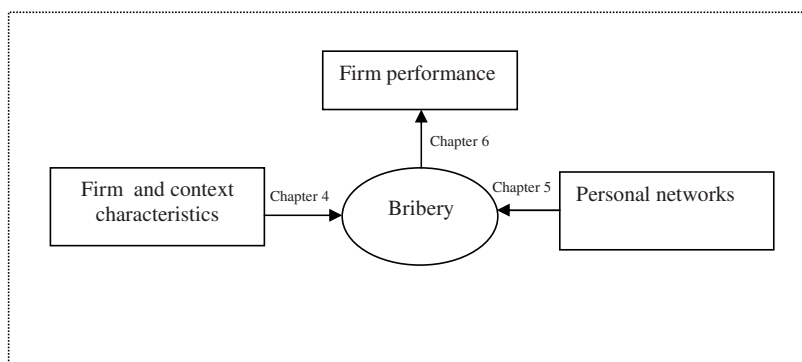
The third aim is to investigate the possible relationship between bribery and organizational performance. In this respect, the current research focuses on the characteristics of the organization as the unit of analysis (cf. Aidis & van Praag, 2007). Organizations in a transition economy can choose whether to engage in bribery activities (e.g., use bribes to manipulate officials to obtain contracts or loans). This does not imply that all organizations in a transition economy actively engage in bribery; on the contrary, some are more involved in it than others. Organizations do not respond to bribery demands uniformly and, likewise, do not supply the same amount of bribes to the same government officials at the same time for similar products and services. Firms in a transition economy presumably pay bribes to improve performance. Therefore, I aim to understand whether and to what extent bribery improves organizational performance in a transition economy.

1.3 Research Background

The existing theoretical explanations for corruption include, among others, principal-agent models, corporate crime perspectives, and ethical decision-making theories (Trevino & Youngblood, 1990). Many of these theories seek to explain bribery from the perspective of

the agent receiving the bribe (i.e., the demand side of bribery) and grand corruption (i.e., corruption that involves a substantial amount of money and high-level officials). In contrast, this study focuses on agents paying bribes and petty corruption (i.e., corruption involving small sums of money and typically junior or lower-level officials). Firm-level corrupt behavior has not been explicitly investigated in organization theory. I attempt to fill this void by grounding my work in institutional and anomie theory (Chapter 4); social network theory (Chapter 5); and social capital theory (Chapter 6). This approach is in line with a leading discussion on organizational corruption in the 2008 special issue of *Academy of Management Review*. Social capital theory (Burt, 1997) offers a network perspective and, in so doing, explains why organizations pay bribes to foster organizational performance. Whereas bargaining theory (Svensson, 2003) can be used to analyze how firm characteristics are related to control rights and power that determine firm-level bribery behavior, anomie theory (Martin et al., 2007; Merton, 1964) explains organizational level deviant behavior caused by external or internal perceived forces. Researchers have used institutional theory (North, 1990) to explain organizational behavior in emerging economies; it emphasizes the influence of institutional systems that shape organizational strategy and processes. The conceptual framework and the structure for this thesis are presented in Figure 1.

Figure 1.1 Conceptual Framework for Firm-Level Bribery in Transition Economies



1.4 Research context

In the Asian region, many countries report impressive growth rates. Countries such as South Korea and Taiwan, as well as transition economies such as China and Vietnam, report annual growth rates of on average 8% (Lau & Park, 2003; Wu, 2009). At the same time, agencies such as Transparency International consistently rate most Asian countries as having the highest levels of corruption (Wu, 2009). This can be denoted a paradox because it is widely believed that corruption inhibits economic growth and lowers investments (Burky & Perry, 1998; Mauro, 1995), distorts competition (Hamra, 2000), increases income inequality (Li et al., 2000), and reduces economic drivers of growth such as foreign trade and human capital (Friedman et al., 2000). Many Asian countries have announced antibribery campaigns and signed international anticorruption agreements. Nonetheless, despite the strong efforts of the national governments to limit corruption, the phenomenon continues to exist (Johnson et al., 2000).

This thesis focuses specifically on Vietnam, for several reasons. First, it is the third largest transition economy after China and Russia (Masina, 2006). Moreover, there are many (new) private initiatives in Vietnam, even though these private companies face many obstacles to start and run their businesses. For example, in a context such as Vietnam, where legal institutions are too weak to secure property rights and problems of moral hazard abound, relationships with public officials are crucial. Bribery may be an important tool to foster these relationships, much more than in Western economies, where regulatory institutions are advanced and in general work appropriately.

Vietnam has reported a strong increase in entrepreneurial activities but also has a reputation of high levels of corruption. It is among the top ten of the most corrupt countries according to the corruption perception index (CPI) (World Bank, 2000). Giving bribes,

according to Global Integrity Organization, is now habitual for Vietnamese firms. Much anecdotal and some case study evidence of corruption in Vietnam is available. Case studies help identify and explore processes; therefore, corruption studies have used this method to study particular corruption-related events (World Bank, 2000). Using case studies, management researchers have revealed some insights into the origin, flow, and process of network-based corruption and the role of corruption methods such as red envelope (money payment), adult entertainment, and power exchange. Notwithstanding the importance of case studies, they focus on isolated events and therefore lack opportunities to generalize findings, determine correlations, and discuss causalities. Therefore, this study collects and analyzes firm-level information for a sample of 606 companies in 2004 and a sample of 201 companies in 2009, both from the Mekong River Delta region in Vietnam. These data sets provide a unique opportunity to study key components of bribery at the firm level.

1.5 Findings, academic contribution, policy recommendations, and managerial implications

The academic contributions of my research consist of new theoretical insights and new empirical results to support these. An extensive review of empirical bribery research (see Chapter two) indicates that firm-level research is relatively rare. As a result, firm-level causes and consequences of bribery remain an underexplored area of research, to date. The lack of firm-level research in general and for transition economies in particular implies that the underlying causal mechanisms that determine bribery as well as the consequences thereof for firms are not well understood. This thesis makes the following theoretical contribution to the extant literature that aim to fill these research gaps. First, in Chapter four I develop a theory of forces that explains why some firms more than others are forced to bribe. Here, the theoretical contributions include the identification of relevant, firm-level external and internal

forces of bribery. The former include the (perceived) level of competition and the (perceived) level of local government. The latter include the size and the age of the focal organization. In this chapter, I contribute to anomie theory (Martin et al., 2007; Merton, 1968) and institutional theory (Welter & Smallbone, 2011) by arguing how in the context of transition economies these internal and external forces determine the likelihood of bribery. Second, in Chapter five I develop a firm-level network theory of bribery. Here, the theoretical contributions include the specification of a model that shows how particular characteristics of personal networks determines bribery incidence. That is, the theoretical model differentiates between firm-level ties or contacts of different kinds: strong ties with local officials and strong ties with government officials. Additionally, I develop theoretical arguments to hypothesize how diversity of firm networks may explain bribery in a transition economy as well. Taken together, the theoretical model presented in Chapter five offers an important contribution to existing business network theories (Adler & Kwon, 2002; Peng & Zhou, 2005; Granovetter, 1973). Third, in Chapter six I offer a theoretical contribution to firm-level bribery research (Svensson, 2003; Aidis & van Praag, 2007) by specifying why the relationship between bribery and firm performance is complex and can best be represented as an inverted U-shaped relationship. The theoretical arguments presented in Chapter 6 explain that bribes are performance enhancing but subject to diminishing returns because, among others, high levels of bribes increasingly absorb the returns on entrepreneurial activities. The theoretical contributions are complemented with the empirical findings reported in this thesis based on relative unique Vietnamese firm-level data.

So, in Chapter four I find that firm characteristics (e.g., age, size, life cycle) affect a firm's likelihood of paying a bribe. Similarly, variations in the business environment (e.g., the perceived degree of competition, the quality of government services) affect a firm's

likelihood of paying a bribe. The results in Chapter five suggest that personal ties with local government officials affect the likelihood of bribery. Such ties reinforce exclusive identities, encourage in-group loyalty and particularized trust, and thereby increase the incentives of and the opportunities for illegal practices such as bribery. Finally, in Chapter six I find a nonlinear relationship between the level of the bribe and firm performance, indicating that in the transition economy context, relatively small bribes are beneficial to performance, whereas larger bribes have negative effects. Taken together, these findings increase the field's understanding of the firm-specific antecedents and implications of bribery and, in this respect, complement macro and country-level studies of the bribery phenomenon.

Understanding the firm-level specific dimensions of bribery is important as guidance for developing government policies that aim to reduce bribery in transition economies. This study's findings provide several important implications for policy makers. First, this study finds that the (perceived) quality of the local government and the (perceived) level of competition influence a firm's likelihood of engaging in bribery. This offers a clear indication that to limit corruption, transition economy governments should put their effort in improving the institutional environment in general and local government performance in particular. A well-functioning government with well-educated bureaucrats, security of property rights, and clear and transparent regulations are needed to reduce corruption. This may require a more holistic approach to create a synergy among, for example, (cross) checks and balances, law enforcement, education awareness campaigns, and cooperation between the state and private sector. A well-functioning control practice, together with a strong anticorruption system, enables policy makers to develop an effective corruption warning system. In so doing, it may decrease opportunities for public officials to solicit bribery. In addition, it may reduce anomic strain that in turn decreases the firm's likelihood to pay bribes. Furthermore, if the positive

effect of the perceived level of competition on bribery involves specific local business environments or local norms, a change of local social norms is necessary for any attempt to lower corruption. Changing norms requires a great deal of time in a local society, and thus the policy measures must be persistent.

Second, the findings suggest that an appropriate understanding of the relationship between corruption and different types of personal ties is important for policy makers. This is because entrepreneurs vary in the strength and variety of personal ties with public officials. Such differences create various responses to the likelihood of bribery, meaning some entrepreneurs are more likely to engage in bribery while others are less. Building a relationship with lower-level officials may honor in-group favors, loyalty, and particularized trust that fosters nepotism and favoritism. As a result, corruption flourishes in a transition economy. Therefore, if the relationship between the particularized trust and bribery is a critical problem, governments can limit corruption by measures such as introducing regular staff rotation in local public administration (Lambsdorff & Nell, 2006). Such actions may weaken the particularized trust between the bureaucrat and the entrepreneur and thus reduce opportunities for bribery demands.

The managerial implications from this study are threefold. First, the findings suggest a clear implication to entrepreneurs: Internal control within the firm is important to circumvent the likelihood of bribery because firm characteristics contribute to bribery practices. If managers are better prepared to cope with internal force that promotes bribery behavior, they could diminish the likelihood of supplying bribes. Furthermore, if they are also more aware of the contextual forces (e.g., competitive environment, institutions) that may facilitate bribery practices but potentially gain strategic advantages, it may help them to comply with

bribery behaviors. In addition, entrepreneurs may better predict their rivals' deviant responses if they engage in bribery practices.

Second, the findings provide evidence that strong ties facilitate bribery incidence. It also implies that if strong ties with local government officials' networks facilitate bribery practices, it may cause harmful effects for outsiders (potential bribe payers). Consequently, collective action against bribery is necessary for all firms, because everyone becomes better off if they are all able to mutually commit to not paying bribes (Kingston, 2005).

Finally, this study implies that bribery may have both advantages and disadvantages. Although entrepreneurs may view it as an investment that helps firms operate successfully in institutionally weak transition economies, they should acknowledge that bribery may crowd out alternative investments and erode incentives for innovation or other activities. The higher the bribes, the more likely they are to deteriorate organizational performance.

1.6 Outline of the thesis

This dissertation consists of a literature review, a chapter that offers a detailed description of the research context and the two survey samples, and three empirical studies. Chapter 2 provides a review of the empirical literature on corruption and identifies gaps for the three empirical chapters. The central aim of this chapter is to highlight the role of firm-level bribery studies, which center on an organizational view, a relatively underexplored perspective in the corruption literature. The literature review illustrates that firm-level studies of corruption are few and far between but are necessary to understand elements of this enduring phenomenon in transition economies.

Chapter 3 describes the research context and the data collected for this research in more detail. In this chapter, I discuss the particular research on Vietnam and highlight the role of entrepreneurs in this country. In addition, I provide a description of data collection using two business surveys in detail.

Chapter 4 investigates which firms in a transition economy pay bribes to government officials and which do not. Although there are a few prior studies focusing on the effects of firm and context characteristics on the likelihood of bribery (Chen et al., 2008; Clarke & Xu, 2004), this chapter complements these studies by analyzing how internal and external forces may explain the likelihood of bribery. I argue that although all firms face forces to pay bribes in a transition economy, they differ in their response to perceived internal and external forces. The empirical analysis in this chapter applies a logistic regression model using a 2004 sample of 606 Vietnamese entrepreneurs to predict the effects of firm and context characteristics on bribery incidence.

Chapter 5 examines how personal ties affect bribery incidence and how different types of ties and network diversity influence its likelihood. Entrepreneurs may vary in the strength and variety of personal ties with public officials. Thus, Chapter 5 investigates whether variation in these characteristics determines variation in bribery incidence. To answer the preceding questions, I use a logistic regression model based on the 2009 sample of 201 Vietnamese entrepreneurs.

Chapter 6 investigates the relationship between the volume of the bribe and firm performance. I argue that bribery facilitates entrepreneurial performance because it allows entrepreneurs to develop trust and foster a network of informal relationships with public officials, thereby reaping the accompanying benefits (e.g., favorable treatments, overcoming liabilities of newness, legitimacy). However, bribery may also have disadvantages such as an inefficient allocation of resources, the effects of the vicious circles of ever-increasing bribes,

and the negative effects of embeddedness. I determine the relationship between bribery and performance using 2004 data of 606 Vietnamese entrepreneurs, controlling for various entrepreneurial, organizational, and industrial characteristics.

Chapter 2

Literature review

2.1 Introduction

Corruption is a multifarious phenomenon with multiple causes and effects. Over the years, an increasing literature stream that explains the causes and consequences of corruption has emerged (Argandoña, 2003; Azfar et al., 2001; Zahra et al., 2005). The study of corruption has become more multidisciplinary and dispersed, ranging from pure theoretical and pure empirical work to detailed descriptions of single corruption scandals. The understanding of factors that determine corruption as well as the consequence of corruption has received widespread attention from scholars in law, economics, organization, and management fields. Thus, corruption has considerably consumed the ink and papers of academic research.

The aim of this chapter is to review existing empirical studies on the determinants and consequences of corruption. To be sure, there is a great deal of variation among empirical research in terms of the aim, constructs, hypotheses, measures, samples, and research methods. This makes a strict comparison of empirical studies difficult if not impossible. Nevertheless, this chapter provides an in-depth overview of the empirical findings in the corruption literature. To explain the determinants and consequences of corruption, I classify the studies into four levels of analysis: country-, firm-, individual-, and multilevel studies. A multilevel study means that different units of analyses (e.g., firm and country characteristics)

are combined in one model. In so doing, I identify the gaps in the corruption literature and develop the research questions for this study.

For this chapter, I use the 2004 literature review by Transparency International (Luo, 2004) as a point of departure. This review identifies 4000 books and journal articles published on corruption in the 1990–2000 period. Among other findings, the study reveals that 74% address politics and public administration issues, 10% take a historical perspective, 9% focus on law and the judiciary, 4% on economics, 2% on ethnography and culture, and 1% on business ethics. Therefore, I conclude that an entrepreneurial perspective, which is the focus of this thesis, toward corruption is very rare. I complement the study of Transparency International as follows. I selected empirical corruption studies for a period following the window of observation of Transparency International—that is, I study corruption in the 1999–2010 period (cf. Andvig et al., 2000; Jain, 2001; Seldadyo, 2008). In addition, I focus on empirical studies to align the insights from the literature with my research. To find corruption studies, I used a keyword approach: I used “corruption”, “bribery”, “bribe”, “graft”, “entrepreneurship”, “entrepreneur”, and “performance” as keywords in the title to search articles in three databases (i.e., EBSCO host, JSTOR, and PICARTA). Furthermore, I used the same keyword approach to cross-check the findings from the first round in ten leading journals in economics, international business, organizational behavior, and management (i.e., *American Economic Review*, *Journal of Public Economics*, *Journal of Development Economics*, *European Journal of Political Economy*, *Academy of Management Journal*, *Strategic Management Journal*, *Journal of International Business Studies*, *British Journal of Political Science*, *Journal of Business Ethics*, and *Journal of Economic Behavior & Organization*). The search effort resulted in 65 studies that empirically analyze causes and consequences of corruption with different levels of analyses.

Notably, I found that most empirical studies in the window of observation focus on the causes and consequences of corruption at the country level (43 of the 65 articles). Moreover, only a few are firm- (14) or individual- (5) level studies. A combination of levels of analyses is even more exceptional (3 studies). The literature search also revealed that corruption is a largely ignored in the small business, entrepreneurship, and management fields (a notable exception is Tonoyan et al., 2010).

The chapter is organized as follows. Section 2 discusses the concept of corruption and bribery. Section 3 presents the causes of corruption, and Section 4 reviews its consequences as identified in the literature. The last section summarizes the main findings and identifies the research gaps that prompt the research questions for the current study.

2.2 Definitions

One of the difficulties in studying corruption is to obtain a concise definition (Jain, 2001). A definition is important because, among other things, it eventually determines how corruption can be measured (Collier, 2002; Heidenheimer & Johnston, 2002; Lancaster & Montinola, 1997; Philp, 1997). The word “corruption” is used to mean different things in different (country) contexts (Bardhan, 1997). The term’s definition ranges from an ad hoc individual act of an illegal payment to the endemic malfunction of an entire political system. The definitions used in the 65 studies of corruption vary from “the misuse of public power” and “moral demolition” to more strict legal definitions such as “an act of bribery concerning a public servant and a transfer of wealth”. It is important that the concept of corruption be clarified before any corruption model can be developed. Thus, this section summarizes and discusses existing perspectives of corruption that shape the definition of bribery used in this thesis.

2.2.1 What is corruption?

The question “What is corruption?” is often raised in the literature. The definitions of corruption developed by the World Bank and Transparency International are commonly used (see Tables A 2.1, A 2.2, A 2.3, A 2.4, A 2.5, and A 2.6 in the appendix A); they define it as “the abuse (misuse) of public power (entrusted power) for private gain.” Corrupt transactions take place at the interface of the public and the private sector (Rose-Ackerman, 1978) through which public goods are illegitimately transferred into private payoffs (Heidenheimer et al., 1989; Luo & Han, 2009).

In the preceding definition, misuse or abuse typically involves applying a legal standard or a breach of legal norms (Johnston, 1986; Kaufmann, 1997). Public (entrusted) power/office refers to the power the public delegates to officials. Corruption occurs when the officials use the power to further their own interests at the expense of the common good (Jain, 2001). The misuse of public power for private gains can be traditionally understood either as private wealth-seeking behavior that deviates from the formal duties of a public role (Khan, 1996; Nye, 1967) or as a response to situations in which opportunities for gain and discretionary power to appropriate that gain are available (Misangyi et al., 2008). Public power, on the one hand, is abused for private benefit when an official accepts, solicits, or extorts a bribe. On the other hand, it is also abused for personal gain when officials actively offer bribes to other (high-level) bureaucrats to circumvent public policies for competitive advantages. Even without a bribe transaction, public power can be abused for personal gain through other forms of corruption, such as nepotism, patronage, embezzlement of state assets, and the distraction of state revenues.

The aforementioned definition of corruption may broadly capture, for example, the sale of government property by government officials, kickbacks in public procurement, bribes (i.e., an offer of money or other favors aim to influence a public official), embezzlement of

government funds (i.e., stealing money or other government property), fraud (i.e., cheating the government through deceit), nepotism (i.e., favoritism shown by public officials to relatives or close friends), and extortion (i.e., money or other resources extracted by the use of coercion, violence, or the threats to use force). These concepts are used interchangeably, but corruption is the most often used and is defined in the tradition of the World Bank (Amundsen, 1999; Jain, 2001).

The term “corruption” is often used interchangeably with “bribery” (Andvig et al., 2000) or a closely associated phenomenon (Weber & Getz, 2004). In the definition of the World Bank, bribery is defined as “the offer or solicitation, promise or gift of undue pecuniary or other advantages whether made directly or through intermediaries, to (foreign) officials or to a third party with the aim of influencing the actions of a public official or the officials’ duties.” This definition thus captures several features, namely the following: (1) giving, offering, or soliciting, which encompasses both sides of the transaction (i.e., the supply [the private sector or the supplier] and demand [the public sector or the receiver] sides of bribery); (2) something of value, including money, services, jobs, favors, payoffs, or (future) promises; (3) influencing the actions of a public official or the officials duties, which implies that the action goes against the law, formal regulation, moral standard, or other legal agreement. From the aforementioned definition, bribes can be understood as payments made to induce a government official to act contrary to his or her duties (James, 2002). Note that there are at least two participants in a bribe transaction: the payer (someone from the private sector) and the receiver (someone from the public sector).

Thus, bribe transactions can be executed by different actors for different purposes. Firms can bribe with the intent of influencing a government’s decision to choose which firms will be allowed to supply goods, services, or receive a government contract; to allocate benefits or subsidies to firms or individuals; or to provide an in-kind benefit (e.g., medical care, access to

specific schools). In addition, firms may bribe officials to reduce the amount of tax or other fees, to obtain issuance of a license, to speed up bureaucratic delays, or to change the outcomes of legal processes. For example, Luo & Han (2009) indicate that “graft” or “bribes” refer to the extent to which the firm engages in various forms of payments to public officials to “get things done” with regard to government or public services such as customs, taxes, licenses, regulations, services, and so on.

Bribery is a bilateral (bargaining) event that involves a person from the public sector (a bribe receiver) and a person from the private sector (a bribe payer) (Cuervo-Cazurra, 2006; Treisman, 2000). This thesis focuses on the bribe payer; that is, the entrepreneur (in a transition economy) is the unit of analysis (Aidis & van Praag, 2007; Martin et al., 2007). Entrepreneurs can choose whether to engage in bribery activities and use them to manipulate officials to, for example, obtain contracts or loans. I do not imply that all entrepreneurs actively engage in bribery; on the contrary, some are more involved in bribery than others. In other words, entrepreneurs do not pay the same amount of money to the same officials for similar services or products at the same time. One of this thesis’s aims is to understand this variation.

2.2.2 Types of corruption

According to World Bank, a distinction can be made between administrative or petty corruption, which refers to paying bribes (between bureaucrats and the political elite or between bureaucrats and the public) for services involving the implementation of regulations, and state capture or political corruption/grand corruption, in which firms or the political elite attempt to influence the formulation of laws, regulations, decrees, or other government policies to their own advantage (Fries et al., 2003; Hellman et al., 2003). Grand corruption is often associated with substantial amounts of money and high-level officials, whereas petty

corruption involves smaller sums of money and typically junior officials. The subject of this study is the first category, petty corruption. It refers to the extent to which firms offer payments to public officials to “get things done” regarding public services, such as customs, taxes, licenses, regulations, services, and so on.

Bribery can also be categorized by its purposes. For example, a distinction can be made between so-called actual and necessary bribes. The former includes bribes to obtain an illegally entitled service. For example, firms pay a bribe to reduce tax payments. In contrast, the latter includes bribes to obtain a legally entitled service. These bribes are the so-called grease money or speed money payments (Argandoña, 2005). For example, firms may pay bribes to avoid bureaucratic delays. There are many equivalent terms for this type of bribery, such as grease money, kickbacks, sweeteners, payoffs, and gratuities. These concepts are also called “facilitation payments” (Argandoña, 2005). Bribery and facilitation payments have minor but nonetheless important differences. For example, Argandoña (2005) suggests that the main difference between bribes and facilitation payments is that facilitation payments tend to be made to obtain something to which the payer is legally entitled. Whether facilitation payments are illegal may depend on the context in which firms operate. There is a grey area in which facilitation payments are offered in terms of charity or donations, gifts, or contributions to political parties (e.g., payments for travel)¹. Note that some of these issues will, in practice, be impossible to regulate by international law and thus need to be addressed by national law to specify whether particular forms of facilitation payments are illegal.

¹ Notwithstanding the relevance of international law, these examples illustrate the need for national legislation to address corruption, because the illegal dimension of corruption is determined by national context. Hence, what is corruption in one nation may not be corruption in another.

2.2.3 The debate about corruption definitions

The debate about definitions of corruption is fostered by its ambiguous nature (Kuncoro, 2006). Many studies do not specify their definition of corruption and/or implicitly align with the World Bank or Transparency International definition (Heidenheimer et al., 1989). In most cases, people are unable to observe the acts of corruption because they occur implicitly. Thus, a commonly accepted definition that captures all aspects of corruption phenomena seems to be an open question (Kurer, 2005). This challenges a study of corruption. A precise definition of corruption will eventually determine its measure and the factors that are included in the research model to explain corruption (Jain, 2001). In what follows, I discuss various scholars' views on the definitions of corruption and the ambiguity that may result thereof.

2.2.3.1 Content

Although the World Bank's definition of corruption as "the abuse of public power for private gain" has been frequently used, a different consensus among scholars prevails (Hodgson & Shuxia, 2007). For example, it is debatable what the "abuse of public power" or "private gain" actually means. Johnston (1996) claims there are two fields of study in the corruption literature: The first one focuses on the behavioral aspects of corruption, and the second defines corruption in terms of the relationship between the principal (state) and the agent (public servants) (Klitgaard, 1988; Rose-Ackerman, 1978). Many behavior-oriented scholars hold the view that corruption is the abuse of power of public office for personal gain in a manner that contravenes the rules of the game (Guerrero & Rodríguez-Oreggia, 2008; Heidenheimer et al., 1989; Khan, 1996; Nye, 1967; Rabl & Kühlmann, 2008). From a principal-agent theory perspective, most researchers pay attention to the interactions between the parties involved: the principal (state) and the agent (public servants). Here, corruption is considered an illegal contract or concealed transaction between two parties. Using Macrae's

(1982) definition, Husted (1999) and Kwok and Tadesse (2006, p. 767) suggest that corruption is an “arrangement” that involves “an exchange between two parties (the official) and the payer which has an influence on the allocation of public resources now or in the future”. Note that they also define corruption as the abuse of public authority for private ends.

2.2.3.2 The problem of ambiguity

The often-used World Bank definition is ambiguous for various reasons. First, a question exists whether the narrow definition of corruption—which limits corruption to particular agents, sectors, or transactions (e.g., corruption defined as deviation from the formal rules that regulate the behavior of public officials)—applies to all societies. The definition is primarily designed to describe corruption in democratic societies and thus may or may not be viable to describe it in nondemocratic societies. Therefore, Li (2009) calls for a more fine-grained perspective to define corruption in nondemocratic societies, more so when a country is in a transition process from a centrally led government to a market economy. For that reason, researchers have suggested that a more generic definition referring to corruption in terms of power abuse would be appropriate to describe corruption in nondemocratic or transition contexts, in which it often is pervasive and massive (Luo, 2002).

Second, although the World Bank’s definition of corruption is frequently used, or indirectly referred to, the use of this definition implies that studies focus on the public sector part of the two-party corruption event. This means that the private sector part is often ignored (Aidt, 2003; Jain, 2001). The World Bank definition only considers the causes of corruption and its abuse within public sector authorities. For example, Mauro’s (1995) influential macro-level study only considers the (negative) effects of corruption on economic growth. As another example, Shleifer & Vishny (1993), who define corruption as “the sale by government officials of government property for personal gain”, also limit their attention to

the government side of corruption only (cf. Daron & Verdier, 2000; Graeff, 2003; Graeff & Mehlkop, 2003; Meschi, 2009; Polinsky & Shavell, 2001; Treisman, 2000).

Third, if the definition of corruption is limited to the public sector part, scholars may face difficulty in determining the boundary between the public and private sectors. For example, some organizations are formally private but are *de facto* owned by the state. Changes of ownership rights may also result in classification problems. In addition, some enterprises are private companies in some countries and public organizations elsewhere or have a mixed form of ownership (e.g., postal services, railways, universities, hospitals). Therefore, accepting an alternative or a broader definition may be necessary to account for a country-specific context (Hodgson & Shuxia, 2007).

Fourth, the World Bank's definition does not account for the fact that not all abuses of public office are corruptive. Several activities by public officials can be classified straightforwardly as fraud, extortion, or embezzlement but, according to the definition, not corruption. Embezzlement, for example, is not considered corruption from a legal perspective but rather a crime; however, it is included in the broader definition of corruption (see the preceding discussion). For example, if a public official simply illegally appropriates a sum of money from the budget without providing any service to anyone, this is not corruption but theft, because although it relates to abuse of public power, it does not involve any other party such as a firm or a civilian. Fraud, which is a broader legal term that covers more than bribery and embezzlement, involves a manipulation or distortion of information by public servants who seek private benefits. Extortion relates to money and other resources extracted through coercion or threats from public officials.

Finally, the concepts of "public office" (Kunicova & Rose-Ackerman, 2005; Treisman, 2000), "public power" (Baksi et al., 2009; Barth et al., 2009; Chen et al., 2008; Collins et al., 2009; Guerrero & Rodríguez-Oreggia, 2008; Gurgur & Shah, 2005; Habib & Leon, 2002;

Huntington, 1968; Johnston, 1996; Kaufmann et al., 2008; Klitgaard, 1988; Luo, 2002; Méon & Sekkat, 2005; Méon & Weill, 2010; Park, 2003; Powpaka, 2002; Weitzel & Berns, 2006; Wu, 2009), “public roles and resources” (Egger & Winner, 2005; Robertson & Watson, 2004), “public or collective responsibility” (Husted, 1999; Kwok & Tadesse, 2006), and “government authority” (Meschi, 2009) are used interchangeably. The question is whether they actually are the same. Many would agree with Nye’s (1967) emphasis on public roles; that is, corruption involves the behavior of an official in his or her public role or public responsibility, whereas public power refers to the power delegated to officials by the public. By the same token, “government authority” may be equivalent to “public power” because it refers to the power authorized. In other words, the definition of public office, defining corruption as violating formal rules of office, is operational but fails to cover cases in which legislation itself is corrupt (Kurer, 2005).

In summary, depending on the context, the word “bribery” can have different meanings. According to the World Bank (2000), for example, bribery is the abuse of public office for private gain. In my research I align with this definition of the World Bank but adapt these to the particular circumstances of a transition economy, more specific the uncertainty of weak institutional environments and the local independency and discretionary power of local public officials. I define bribery as the payment of cash by an organization with the aim of influencing the actions of a public official. This definition is relevant for the research context of my study because it specifically accounts for (a) the type of bribery (i.e., money and not, for example, visits to bars), (b) the research unit of the briber (i.e., a firm and not, for instance, an individual), and (c) the aim of bribery (i.e., the receiver of the bribe is a government official being paid to make arrangements for the firm in question). Hence, my definition of bribery precisely conceptualizes the relevant nature of bribery in transition

economies because it includes three conditions that need to be satisfied in order for bribery to have a useful meaning in the research context under consideration, that is, Vietnam.

2.3 The determinants of corruption

This section reviews the 65 empirical studies with respect to the causes of corruption. The aim is to explore existing empirical evidence about the determinants of corruption. It is important to understand the factors that cause corruption because it provides the opportunity to identify research gaps. The first subsection presents country-level determinants of country-level corruption. Next, I review firm-level determinants of firm-level corruption, followed by determinants of individual-level corruption. Last, I discuss multilevel studies of corruption.

2.3.1 Country-level determinants of country-level corruption

Seldadyo (2008) identifies four groups of macro-level causes of corruption: (1) economic, (2) political, (3) judicial and bureaucratic, and (4) religious and geocultural factors. Using this classification, I review the 65 empirical studies of corruption. Table A 2.1 (see appendix A) offers an overview of these studies, presenting information about the authors, the definition of corruption used in the study under consideration, and the dependent variable and determinant of corruption of interest (including the main significant findings) for each study.

Economic factors

Economic factors refer to a wide variety of variables, among which are national income, government expenditures, government size, international trade, and economic freedom.

Economic factors also include demographic variables such as human capital (schooling) and other characteristics such as population size.

National income is a typical variable used to explain corruption (Ali & Isse, 2003; Damania et al., 2004; Persson et al., 2003; Van Rijckeghem & Weder, 1997). There is a wide consensus in the literature about the existence of a negative correlation between corruption and national income (usually measured by per capita gross domestic product) (Ades & Di Tella, 1999; Braun & Di Tella, 2004; Brunetti & Weder, 2003; Chang & Golden, 2007; DiRienzo et al., 2007; Fisman & Gatti, 2002; Graeff & Mehlkop, 2003; Kunicova & Rose-Ackerman, 2005; Lancaster & Montinola, 1997; Montinola & Jackman, 2002; Serra, 2006; Treisman, 2000). The explanation is that higher income will lower the incentives for corruption because public servants with sufficient income will have less need to supplement their income with corruption. The evidence for this proposition is mixed. For example, Braun and Di Tella (2004) analyze panel data sets of 75 countries and find that higher national income could also increase corruption. The authors explain this counterintuitive finding as a result of a decline of moral standards that occurs during a fast-growing economic period.

The size of government is also an important source of corruption. The argument for corruption and government size is based on the assumption that reducing the government's role in an economy may lower corruption. In contrast, a large government with more regulations and other forms of market intervention may generate more opportunities for bribery; that is, the larger the (relative) size of the public sector, the greater the likelihood of corrupt public official behavior. In addition, the more regulations the government has in place, the more likely private sector actors will bribe government officials to circumvent legal requirements. Some scholars find a positive impact of the size of the government on corruption (Ali & Isse, 2003). Husted (1999) finds evidence that a larger government in societies characterized by a greater acceptance of authority causes more corruption.

However, the size of government is also negatively associated with corruption when size is measured by government expenditure or decentralization. The argument is that higher

government expenditure involves higher wage levels for the public sector, thereby reducing the incentives for corruption. Montinola & Jackman (2002) find evidence that government size (proxied by government expenditure) is negatively associated with corruption for a sample of the Oil Producing and Exporting (OPEC) countries. Graeff & Mehlkop (2003) and Fisman & Gatti (2002) also find the same results.

Corruption can also be explained by other economic variables such as import share, international trade, and economic freedom. Treisman (2000), Herzfeld & Weiss (2003), and Frechette (2006) all suggest that the share of import in national income correlates with corruption. A greater share of import in national income decreases corruption because it is associated with lower tariffs on imports (Seldadyo, 2008). Import restrictions such as quota and licenses may foster a need for and opportunities to bribe. Likewise, a high export of raw materials (e.g., oil, gas, minerals) in particular increases the probability of corruption occurring, especially in resource-abundant countries (Frechette, 2006), because these activities are under the control of the government and often require private firms to have licenses for the use of the resources.

Studies on the relationship between foreign direct investments and corruption show mixed findings. For example, Kwok & Tadesse (2006) suggest that corruption decreases when foreign direct investments increase. With foreign direct investments through multinational companies, host countries are exposed to rules and regulations from the home countries of the investing firm, thereby somewhat constraining local government officials in their bribery acts. However, Robertson & Watson (2004) argue and present evidence for the proposition that a change in foreign direct investments will positively correlate with corruption. Foreign direct investment indicates that foreign firms are eager to capture opportunities in a host country. Host nations may resort to corruption as a means of sharing the profit opportunities.

Foreign trade (openness), economic freedom, and foreign aid are also important sources of corruption. Ades and Di Tella (1999) suggest that openness to foreign trade is a primary factor for experiencing relatively low levels of corruption (cf. Brunetti & Weder, 2003; Fishman & Gatti, 2002; Persson, 2003). This argument suggests that the greater the barriers to entry and exit that firms face, the greater the distortions in a business environment, and therefore the more widespread corruption will be (Baksi et al., 2009; Gurgur & Shah, 2005). The impact of foreign aid on corruption shows mixed effects. Whereas Tavares (2003) reports a negative relationship between foreign aid and corruption, Ali & Isse (2003) suggest a positive relationship. Foreign aid may increase government consumption but, at the same time, also create opportunities for government corruption practices. However, foreign aid may also be associated with rules and conditions that limit the discretion of the recipient country's officials, thereby decreasing opportunities for corruption.

Economic freedom is argued to reduce corruption. According to the Heritage Foundation, economic freedom is defined as the fundamental right of every human being to control his or her own labor and property. Treisman (2000), Gurgur & Shah (2005), Ali & Isse (2003), Park (2003), and DiRienzo et al. (2007) find support for this view, but Graeff & Mehlkop (2003) find mixed results. Graeff & Mehlkop indicate that the impact of economic freedom on corruption depends on the area to which economic freedom applies. For example, improving the legal structure (e.g., the security of private ownership rights, the risk of contract repudiation by government) leads to less corruption because a weak legal structure generates opportunities for corruption.

In addition, other sociodemographic determinants such as human capital (education) and population size have an impact on corruption. In general, human capital is negatively associated with corruption. Investing in educational systems in poor countries with weak institutions is argued to reduce corruption (Ali & Isse, 2003; Emerson, 2006; Kwok &

Tadesse, 2006; Persson, 2003). A better-educated population will suffer less from bribery activities by politicians because better educational systems expose people to new ways of thinking and potentially prompt them to change the old ways of life, including corruption (Kwok & Tadesse, 2006). Thus, this finding implies that a more educated society would be expected to tolerate bribery less. There is conflicting evidence for corruption and a country's population size. Knack & Azfar (2003) find that when population increases, it leads to an increase in the level of corruption. In a large country with a relatively low density of government officials per citizen, citizens may bribe officials to jump in the bureaucracy queue (Fisman & Gatti, 2002). However, Tavares (2003) reports that population size negatively affects corruption.

Political factors

The impact of democracy and other factors are present in many empirical studies. Other factors include the electoral system (Kunicova & Rose-Ackerman, 2005), governmental administration (Chang & Golden, 2007), political instability (Park, 2003), political freedom (Swamy et al., 2001), and presidentialism (Chang & Golden, 2007).

The literature shows mixed findings for the commonly held hypothesis that democracy decreases corruption (Ades & Di Tella, 1999; Braun & Di Tella, 2004; Emerson, 2006; Frechette, 2006; Henderson & Kuncoro, 2010; Kunicova & Rose-Ackerman, 2005; Montinola & Jackman, 2002; Serra, 2006; Tavares, 2007; Treisman, 2000). Research shows that the negative effect of democracy on corruption is often conditional on other democracy-related variables such as freedom of the press (Brunetti & Weder, 2003), because democracy increases the level of transparency and checks and balances within a political system. Moreover, political participation, political competition, and constraints on executives increase the ability of the population to monitor and legally limit politicians to bribe. DiRienzo et al.

(2007) suggest that the availability of information by means of digital access can create more transparent rules, laws, and transactions, resulting in greater accountability and thus less corruption. In contrast, higher levels of government intervention or centralization increases corruption incidence (Montinola & Jackman, 2002) because it distorts competition and introduces opportunities for bribery by political actors.

In addition, Tavares (2007) finds that deregulation of markets diminishes corruption. He also shows that political and economic reforms may increase corruption for countries that deregulated markets more than five years after they democratized. Economic reforms decrease corruption by introducing (more) competition, and political reforms make politicians accountable to voters. Sung (2004) finds a curvilinear relationship between democracy and corruption. In addition, Sung shows that the manner in which democracy affects corruption depends on the initial democratic conditions as well as the eventual democratic achievements of a country. Sung's results indicate a negative connection between corruption and democracy in both less democratic countries and democratic countries, though a positive connection predominantly exists in democratic ones.

It is acknowledged that corruption increases under sociopolitical instability (Park, 2003; Serra, 2006). A greater political instability generates the perception among politicians and bureaucrats that the probability of winning elections does not depend solely on their actions but also on bribes, thus increasing the incentives to bribery. Democratic elections may create opportunities for corruption. Kunicova & Rose-Ackerman (2005) and Persson et al. (2003) find that choosing politicians through party lists (or closed lists) increases corruption because the voters have limited ability to hold politicians accountable. Chang & Golden (2007) find a positive relationship between district size and corruption under open-listed proportional representation. Persson et al. (2003) report that under closed-listed proportional representation, corruption decreases as district size increases.

The role of government decentralization or federalism in causing corruption is a subject of debate among scholars. The argument is that decentralization increases the accountability of government bureaucrats that may better suit local populations in terms of the provision of public goods. Fisman and Gatti (2002) report a negative impact on corruption; that is, fiscal decentralization leads to less corruption (cf. Ali & Isse, 2003; Gurgur & Shah, 2005). In contrast, Treisman (2000) shows a positive correlation between corruption and federalization. Kunicova & Rose-Ackerman (2005) and Fan et al. (2009) report the same result. Measuring decentralization relates to transfers of responsibilities from a central government to other levels of (national) government. Thus, although federalism is associated with corruption (Goldsmith, 1999), a divided political structure also facilitates opportunities for corruption (Brown et al., 2006). If decentralization creates many tiers of government, it may weaken accountability, as voters find it difficult to place blame for failures or successes (Fisman & Gatti, 2002).

Judicial and bureaucratic factors

The quality of bureaucracy or of the judicial system is an important factor in explaining corruption. First, public sector wages are strongly associated with measures of the quality of bureaucracy, thereby affecting the level of corruption. Scholars claim that two of the most prominent indicators for the relative high levels of corruption in developing countries are the low civil servants' wages and a lack of institutions for detecting corruption. Herzfeld & Weiss (2003) provide evidence that when civil servants' wages increase, corruption decreases significantly. In addition, Rijckeghem & Weder (2001) and Brunetti & Weder (2003) find that corruption decreases when the quality of bureaucracy is enhanced. Second, there is a consensus regarding the negative impact of the rule of law on corruption (Ali & Isse, 2003; Gurgur & Shah, 2005; Kwok & Tadesse, 2006; Park, 2003; Rijckeghem & Weder, 2001).

This is because a weak legal system in which basic rule of law is lacking or missing may provide opportunities for corruption through its failure to legally constrain those in power.

Religious, cultural, and geographical factors

Research has highlighted religion, culture, and geography as important factors that influence corruption. Many scholars find that countries with a dominant Protestant religion tend to have lower corruption because of the public's willingness to denounce malfeasance in politicians and bureaucrats (La Porta et al., 1999). Regarding cultural variables, scholars have found that ethnolinguistic heterogeneity increases corruption (La Porta et al., 1999; Treisman, 2000): The opportunity for officials to bribe may increase in highly decentralized ethnic groups. In addition, the dominance of one ethnic group in a country may foster unbalance in the power between minorities and the dominant ethnic group, thereby creating potential for corruption. Highly fragmented communities are more likely to tolerate corruption than more homogenous societies.

Colonial heritage is another cultural variable that may also matter for explaining corruption. The commonly held arguments for a positive relationship between colonial past and corruption involve the decisive nature of government, whereas a negative relationship is often explained by the heritage of past colonial systems. The empirical results are mixed. Gurgur & Shah (2005) and Tavares (2003) suggest that colonialized economies tend to suffer from corruption. The decisive nature of the society, control habits, and institutions are inherited from the colonial masters. This often results in a highly centralized regime, which increases the opportunities for bribes, as is the case in India, Kenya, Pakistan, and Indonesia (Gurgur & Shah, 2005). In contrast, Herzfeld & Weiss (2003) and Serra (2006) find that former British colonies have lower levels of corruption. According to these authors, this is not due to greater trade openness or increased democracy but rather to traditional religions

and existing protections against public abuse provided by the British common law system. Treisman (2000), Swamy et al. (2001), and Persson et al. (2003) find similar evidence for a colonial past's negative impact on corruption.

Cultural values may play a key role in determining corruption. Recent studies have reported that countries with a higher degree of masculinity are likely to inhibit more corruption (DiRienzo et al., 2007; Husted, 1999; Park, 2003; Robertson & Watson, 2004; Sanyal, 2005). Others find evidence that corrupt countries are characterized by high uncertainty avoidance (Husted, 1999; Robertson & Watson, 2004), high power distance (Husted, 1999; Kwok & Tadesse, 2006; Sanyal, 2005), and less individualism or more collectivism (DiRienzo et al., 2007; Kwok & Tadesse, 2006). These results notwithstanding, Kwok & Tadesse (2006) show that the relationship between power distance, individualism/collectivism, and corruption are significantly lower with the presence of foreign direct investment. This is because, as mentioned previously, the presence of foreign direct investment may constraint local government officials in their corrupt acts because of regulations in home countries.

Finally, the geographic location of a country—measured by latitude and longitude—may also determine corruption. La Porta et al. (1999) find that countries located far from the equator tend to have less corruption. Ades & Di Tella (1999) suggest that corruption and trade distance are strongly associated for countries located far away from exporting nations because distance may provide a natural barrier to protect such countries from foreign competitors due to high transport costs, thereby increasing corruption.

2.3.2 Firm-level determinants of firm-level corruption

Firms operating in the same country may vary in their propensity to pay bribes because of (1) characteristics specific to the individual firms, (2) organizational context, (3) employees' individual characteristics and different perceptions of the external environment, and (4) location. This section offers a review of firm-specific factors that influence corruption classified into the aforementioned four groups. Table A 2.2 (see appendix A) offers an overview of these studies, presenting information about the authors, the definition of corruption used in the study under consideration, and the dependent variable and determinant of corruption of interest (including the main significant findings).

Firm characteristics

Studies of bribery on the individual firm level are rare but have attracted increasing attention in recent years. For example, Svensson's (2003) prominent study uses a sample of 176 firms in Uganda and finds that profits and the estimated alternative returns on capital are drivers of bribery: Profitable firms are able to pay more bribes, and firms with a higher alternative return to capital can pay lower bribes because the greater the firm's ability to pay a bribe (proxied by profits or sales in Svensson's study), the more vulnerable position the firm is in a negotiation process, thereby increasing the likelihood to pay a bribe. Conversely, a firm will pay fewer bribes if the refusal to pay bribes costs a firm less. Consistent with Svensson's (2003) study, Clarke & Xu (2004), using a survey of utilities in 21 transition economics in Eastern Europe and central Asia, show that firms are more likely to pay bribes when they are more profitable. Safavian et al. (2001) reports the same result. Notably, Safavian et al. also find that entrepreneurs with diverse income portfolios are less likely to experience bribe demands because exiting the market is not expensive.

Other firm-level studies have identified firm characteristics such as firm age, firm size, manager characteristics, and types of ownership to explain variation in bribes across firms. Kuncoro (2004) and Cabelkova & Hanousek (2004), for example, find that older firms are less likely to bribe because they are more likely to have established an ongoing relationship with government officials, which reduces bribes in that a strong tie with officials may create an advantageous position for private firms in the bribe bargaining process. In contrast, de novo private firms are expected to pay more bribes than other firms (Clarke & Xu, 2004). A plausible explanation is that de novo firms will earn more profits than established ones and/or are more vulnerable to bribery demands due to a lack of political influence (political protection). In contrast, Collins et al. (2009) find that the likelihood of a firm engaging in corruption is considerably influenced by a manager's social ties with officials and his or her propensity to rationalize paying bribes.

The type of ownership can explain differences in bribes paid by firms. Family or self-employed companies are more likely to pay bribes because they are vulnerable to bribery demands and are thus perceived by officials as ideal "trading" partners (Wu, 2009). Government-owned firms are less likely to pay bribes than those without government ownership because they receive institutional support from government agencies. In addition, the international activities of a firm may matter. Export firms engage less in bribery because they are less susceptible to local corrupt environments and may receive more preferential treatments, especially in emerging economies in which export-oriented policies are strongly supported (Luo & Han, 2009). Moreover, export firms may have greater access to external finance and thus have more bargaining power in negotiations for loans with local banks or government officials (Barth et al., 2009).

Business context

Recent studies have suggested that the influence of industry contexts on corruption may also be a significant factor. Svensson (2003) finds that the incidence of bribery can be explained by the variation of policies or regulations across industries. Firms must pay more bribes when dealing with officials whose actions directly influence their business activities (e.g., exporting, importing) than those who do not. Kuncoro (2006) finds that a firm's willingness to pay bribes is a function of government-related burdens such as licensing, tax (cf. Wu, 2009), monthly inspections (cf. Safavian et al., 2001), and time spent with bureaucrats (cf. Kuncoro, 2004).

Furthermore, researchers have acknowledged that the quality of the legal environment and local government services determines corruption (Guerrero & Rodríguez-Oreggia, 2008; Wu, 2009). Thus, weak institutions lead people to trespass legality and increase the willingness to pay bribes. Barth et al. (2009) report that corruption decreases as courts and law enforcement are improved and become more objective. The more transparent the interpretation of laws and regulation is perceived to be and the more efficient government services are, the less firms are willing to pay in bribes (Wu, 2009).

Competition may influence corruption; however, empirical results indicate conflicting findings for this factor. Wu (2009) finds a positive connection between competition and corruption for Asian firms, but Clarke & Xu (2004) find a negative relationship in 21 transition economies in Eastern Europe and central Asia. When market competition increases, firms may find opportunities to sell their products in new markets, and this decreases their dependence on government (procurement) contracts to meet sales targets (Ades & Di Tella, 1999; Clarke & Xu, 2004). Barth et al. (2009) find that competition among banks (in 56 countries surveyed by the World Bank) may curtail corruption because information sharing

could reduce the informational rents that loan officers or banks can extract from their customers and thus enhance detection of bank-lending corruption.

Researchers have also argued that characteristics of the industrial context affect corruption. Collins et al. (2009) claim that firms operating in professional service industries (e.g., accounting, consulting and legal services, financial services, health care) are less likely to pay bribes because they face greater normative forces than those in nonservice industries (DiMaggio & Powell, 1983). Kuncoro (2004) suggests that firms in the service sector must pay more bribes than those in manufacturing or agriculture because they obtain most of their revenue in cash on a daily basis—which attracts attention from government officials.

Last, Luo & Han (2009) find evidence that local firms with oversea investments and firms with stronger local market power engage less in bribery than others. Firms with overseas investments are less dependent on local agencies and are subject to higher standards of corporate governance and accountability mechanisms to stakeholders, which decreases incentives to engage in bribery (Yadong, 2006).

Location

The particular geographic location in which a firm operates may affect the likelihood to bribe. In Indonesia, Kuncoro (2006) finds that city-based firms appear to pay somewhat higher bribe rates than rural companies. Cabelkova & Hanousek (2004) report that the larger the town, the more corrupt state institutions are perceived by private firms. In contrast, Luo & Han (2009) find that location has a positive influence on firm corrupt actions; that is, those located in smaller cities appear to be involved in more bribery activities. Although Kuncoro (2004) finds no evidence for differences between urban and nonurban locations in relation to

bribes for Indonesia, he does find that firms in oil-rich districts are more likely to pay bribes than those in non-oil-rich districts.

2.3.3 Individual-level determinants of firm-level corruption

It is worthwhile to mention that the corruption literature indicates that individual (actor-specific) characteristics may also explain variation in bribes across firms. Table A 2.3 (see appendix A) offers an overview of these studies, presenting information about the authors, the definition of corruption used in the studies under consideration, and the dependent variable and determinant of corruption of interest (including the main significant findings).

Guerrero & Rodriguez-Oreggia (2008), for example, find that men are more prone to corrupt behavior than women. In a similar vein, Swamy et al. (2001) suggest that women on average are less tolerant of corruption. Gatti et al. (2003) find that employed, less wealthy, and older people appear to be more averse to corruption. Among other reasons, it is suggested that older people are less prone to corruption because they are less involved in bureaucratic procedures in daily life (Cabelkova & Hanousek, 2004).

Studies have argued that education influences corruption (Cabelkova & Hanousek, 2004). Guerrero & Rodriguez-Oreggia (2008) suggest that the higher a person's education level, the more likely (s)he will pay a bribe. They argue that education is a proxy for opportunity costs and that the higher the opportunity costs, the higher the probability of paying a bribe. However, Luo & Han (2009) find a negative connection between leadership education and corruption. The former is inconsistent with studies at the macro level, which argue that the higher the level of education at the population level, the lower the incidence of bribery.

Recent studies also provide valuable insights to understanding how the perception of corruption determines bribery behavior. Cabelkova & Hanousek (2004), for example, find

that the greater the perceived corruption of an organization, the more probable it is that a person dealing with that organization will offer a bribe. Guerrero & Rodriguez-Oreggia (2008) suggest that people sharing the idea that institutions are corrupt are more prone and willing to pay bribes. Moreover, they also find a negative connection between blaming and bribery incidence, meaning that the bribery decision may be based on an individual person's moral and ethical understanding of the situation. In addition, Powpaka (2002) finds evidence that the attitude toward bribery (or the perceived consequences of bribery behavior) and the subjective norms (e.g., the perceived approval by important others) positively affect a manager's decision to bribe (cf. Rabl & Kühlmann, 2008), whereas the perceived choice (i.e., the power or opportunity to choose to give a bribe to win a contract) negatively influences the decision to bribe. Thus, the more favorable the attitude toward bribery behavior, the stronger the intention or desire to perform this behavior (Rabl & Kühlmann, 2008).

2.3.4 Multi-level studies of corruption

My literature review indicates that very few multilevel empirical studies on the causes of corruption exist. Nonetheless, the few studies that have a multilevel perspective are worth mentioning. I define multilevel studies as those that combine, for example, country- and firm-level characteristics in one model.

First, Mocan (2008) uses information on 49 countries and combines macro-level characteristics (e.g., unemployment rates, average education of the population, population size) and individual characteristics (e.g., age, income, gender, civil and employment status) into one model. Mocan reports a set of notable results. For example, he finds that a one percentage point increase in the male unemployment rate in a country increases the risk of bribery by .06 percentage points. An increase in the average education level of the country's

population is negatively related to corruption. Mocan reports partial support for the effects of population size in developing countries, suggesting that with a larger population, the number of contacts with government officials increase. Mocan also shows that individual characteristics may determine bribery. For example, men are more likely to be asked for a bribe because they are perceived as having more contacts or interactions with government officials in daily life and having a higher tolerance for illegal behavior (cf. Mocan & Rees, 2005). Older people and unmarried people are less likely to be asked for a bribe because they deal less frequently with the government. A notable result from Mocan's (2008) study is that people with higher personal income and better education in developing countries are more likely to be targeted for bribes. Mocan explains this by noting that these people would have more contacts with the government. In addition, people who live in smaller cities have a lower incidence of being asked for a bribe (Mocan, 2008) because they have lower risk of exposure to bribery or fewer opportunities to interact with extensive government bureaucracies than those in larger cities. In addition to individual-level variables, Mocan (2008) finds that in countries where the risk of expropriation (as a proxy for the quality of institution; see Acemoglu et al., 2001) is lower, the likelihood of being asked for a bribe is also lower.

The second multilevel study, Chen et al. (2008), uses a data set with information from 55 countries to investigate the combined effects of macro variables and industry- and firm-specific variables on the likelihood of firms paying bribes. For example, at the country level, they find that education level (measured by the average number of years of schooling for adults) has a negative relationship with the incidence of being asked for a bribe (Chen et al., 2008). It confirms the perspective that a more educated population is expected to be less tolerant of corruption. Like Mocan (2008), they also find evidence that population size is

positively associated with bribery, particularly in developing countries. Chen et al. also note that countries with a common law tradition have less bribery than those with other legal systems. The common law system tends to expand the rights of property owners and limit the power of governments. A greater protection of property against the state embodied in the common law systems improves various aspects of government performance, and reduces corruption (cf. La Porta et al., 1997; Treisman, 2000). With regard to the influence of culture, Chen et al. find that Hofstede's masculinity indicator has a significant positive effect on the incidence of bribery, meaning that more masculine societies tend to have higher incidence of bribes. At industry level, Chen et al. (2008) claim that a firm in an industry with more intense competition is more likely to pay bribes because a more competitive market may provide strong incentives for firms to use any means possible to gain a competitive edge—even illegal methods such as bribery. At the firm level, Chen et al. find that firms with greater sales are less likely to bribe because they are expected to have more assets to pursue legal action against public officials who ask for bribes. Moreover, larger firms have more resources (including political ties) to pursue legal action. In addition, exporting firms are more likely to engage in bribes than nonexporting firms because they have more interactions with officials (e.g., customs clearance, licenses). Firms that depend heavily on public infrastructure tend to pay more bribes to officials than those that do not to smooth business operations.

The final multilevel study, Martin et al. (2007), uses a data set with approximately 4000 firms worldwide to investigate multilevel antecedents of firm-level bribery. At the macro level, Martin et al. find that social welfare and political constraints relate negatively to bribery incidence. Social institutions are expected to drive or inhibit anomic conditions that can result in deviance such as bribery (cf. Messner & Rosenfeld, 2001). Strong political constraints in a society reduce the likelihood of bribery because of governmental checks and

balances in the form of regulations imposed to limit and constrain the power of politicians and lawmakers (cf. Delios & Henisz 2000, 2003). In contrast, (perceived) financial constraints (at the organizational level) can increase a firm's likelihood of bribing to overcome finance limitations. Moreover, Martin et al. find that the level of competition in the market is positively associated with the incidence of bribery; in other words, they find evidence that higher degrees of perceived competition increase the likelihood that firms engage in bribery.

National culture is another macro-level variable that influences the likelihood of engaging in bribery. Martin et al. (2007) find evidence that the cultural value of both an achievement orientation and a human orientation is negatively related to the incidence of bribery. In-group collectivism is negatively associated with bribery incidence because, as Martin et al. explain, collectivist cultures emphasize the role of societal members who may deter firm deviant behavior such as bribery aimed at forwarding self-interested goals and aspirations.

2.4 The consequences of corruption

Next, I turn to the consequences of corruption identified from the empirical corruption studies from 1999 to 2010. I identified two groups: The first group studies country-level consequences of country-level corruption and the second studies firm-level consequences of firm-level corruption. Table A 2.5 (see appendix A) offers an overview of these studies, presenting information about the authors, the definition of corruption used in the study under consideration, and the dependent variable and determinant of corruption of interest (including the main significant findings).

2.4.1 Country-level consequences of country-level corruption

Economic factors

The effects of corruption on economic growth and foreign direct investments has been firmly established (Mauro, 1995). In general, scholars find empirical evidence that supports the existence of a linear negative relationship between corruption and economic growth and investment (Brouthers et al., 2008; Cuervo-Cazurra, 2008; Habib & Leon, 2002; Méon & Sekkat, 2005; Méon & Weill, 2010). An exception is Egger & Winner (2005), who find empirical support for a positive relationship between corruption and (inward) foreign direct investment. They explain this by noting that (inward) foreign direct investment can facilitate transactions in countries with excessive regulation (Huntington, 1968; Leff, 1979). Investors who greatly value their access to certain assets are simply willing to pay for this access (Lui, 1985).

Unlike other scholars, Cuervo-Cazurra (2006) finds that the impact of corruption on foreign direct investment can have both negative and positive effects. He shows that corruption in a host country results in (1) less foreign direct investment from countries that have signed the Organisation for Economic Co-operation and Development's "Convention on Combating Bribery Abroad", due to the costs of being caught and the mutual monitoring mechanism but (2) more foreign direct investment from countries with high levels of corruption. Méndez & Sepúlveda (2006) therefore conclude that a nonmonotonic relationship between corruption and economic growth exists. They argue that corruption is beneficial for economic growth at low levels of bribery incidence but detrimental at high levels.

Industry context

The impact of competition on corruption is well established (Ades & Di Tella, 1999; Bliss & Di Tella, 1997). However, researchers have also noted that the level of corruption itself is a determinant of competition. Using cross-country data, Emerson (2006) finds that the level of corruption is inversely related to competition, meaning that the higher the level of corruption, the lower the level of competition in an economy, because corrupt officials are assumed to be able to demand bribes from formally registered firms. If officials are entitled to issue licenses and/or implement regulation, they can thereby limit the number of formally registered firms in a market at their own interest. As a result, the level of competition decreases.

Likelihood of engaging in bribery and political behavior

The relationship between foreign direct investment and corruption has been debated among researchers (Cuervo-Cazurra, 2006). In particular, the relationship between the political behavior of a multinational enterprise and corruption in a host country is considered critical to international expansion and firm growth. Luo (2006) finds evidence that when perceived corruption in a business segment increases, a firm's likelihood of cooperating with a host government decreases. Cooperation between a multinational firm and a host government may be considered collusive in the public's eye (Lambsdorff, 2002), and colluding with a corrupt government may harm a firm's reputation (Shleifer & Vishny, 1993). In addition to Luo's (2006) findings, researchers have shown that when perceived corruption increases, a multinational firm's focus on ethical codes also increases, because multinational firms often emphasize ethical codes of conduct to organizationally respond to increasing host-country corruption (Doh et al., 2003).

2.4.2 Firm-level consequences of firm-level corruption

A common understanding of corruption researchers is that bribery is detrimental to a nation's welfare (Mauro, 1995; Wei, 1997). However, bribery also provides a means of coping with resource shortages, distorted markets, and administrative incompetencies (Leff, 1979; Nye, 1979), which suggests benefits for firms. In what follows, I review insights of firm-level studies about the firm-level consequences of corruption. I classify and summarize the empirical literature of the firm-level effects of corruption into three groups: (1) economic factors, (2) institutional factors, and (3) behavior. Table A 2.6 (see Appendix A) provides an overview of these studies.

Economic factors

As mentioned previously, in general, at the country level, corruption is considered detrimental to investments and economic growth (see Mauro, 1995; Méon & Sekkat, 2005). In a similar vein, corruption at the firm level is also expected to be negatively correlated to firm performance. Gaviria (2002) finds that the growth rate of sales decreases as bribery payment increases. Fisman & Svensson (2007), using a sample of 243 firms in Uganda from 14 industries located in five different areas in the period 1995–1997, find similar results. They find that a one percentage point increase in the bribery rate is associated with a reduction in firm growth of three percentage points, an effect approximately three times greater than that of taxation. However, this consensus about the negative effects of corruption at a firm level has been challenged, especially in developing countries such as some Asian economies (Kaufmann & Wei, 1999). Vial & Hanoteau (2010) find that firm output and firm labor productivity growths are positively associated with bribe payments. They show that average bribe rates contribute to approximately half the average output growth of firms,

compared with average indirect tax rates, which contribute less than half the average output growth of firms. Thus, Vial & Hanotou conclude that these findings support the “efficient grease” hypothesis, meaning that paying bribes helps firms overcome red tape and other barriers of doing business.

Institutions

Although corruption can enhance firms’ efficiency (Lui, 1985), researchers argue that this mechanism no longer applies when government regulations are considered exogenous hurdles that can be partially mitigated through illegal payments. From this perspective, restrictions on economic activities and bureaucratic procedures can be considered a consequence, rather simply the initiators, of government officials’ income-enhancing activities. Bureaucrats are often assumed to be able to adjust government restrictions to maximize bribe collection and not simply take them as given. Using a private sector survey conducted by the World Bank and Inter-American Development Bank, Gaviria (2002) finds that bureaucratic interferences and bribe payments are positively correlated at the firm level. Thus, bureaucratic interference is greater in firms that are more likely to pay bribes, defying the conventional wisdom that bribes can increase efficiency by allowing firms to circumvent bureaucratic harassment. In addition to the problem of government officials’ arbitrary use of regulations, another issue involves access to public services. Low-income people or different-sized firms may pay different amounts of bribes than others to obtain the same public services (Svensson, 2003). Kaufmann et al. (2008) find evidence that the accessibility of government services significantly reduces as corruption increases.

Likelihood of engaging in bribes and behavior

Corruption affects not only the levels of foreign direct investment, but also its composition. Meschi's (2009) empirical study—which uses data from Transparency International and the Political Risk Service data set of International Country Risk Guide—suggests that the likelihood that foreign partners terminate an international joint venture is positively and negatively related to the level of corruption. The greater the corruption, the more likely foreign partners will rely on local partners for their (intangible) assets, and the more they will be willing to keep the international joint venture (IJV) stable. In contrast, where government corruption is reduced, foreign firms are less dependent on local partners, and they are encouraged to terminate the IJV. This also means that if corruption is absent, foreign investors, especially when interested in protecting intangible assets, would prefer wholly owned subsidiaries.

2.5 Conclusions

The main aim of this chapter is to summarize the key findings from empirical research on the causes and consequences of corruption. My literature search identified 65 studies, which I classified into four groups according to the unit of analysis: country-, firm-, individual-, and multilevel studies of corruption. When reviewing the literature, I found that most empirical studies in the window of observation (1999–2010) focus on the causes and consequences of corruption at a country level (43 of the 65 studies). Furthermore, only a few are firm-level (15), individual-level (4) or multilevel (3) studies. Taken together, this suggests that a micro perspective in empirical research on corruption is an underexplored area of research. Therefore, I study firm performance and firm behavior to the extent that they are related to bribery in transition economies. The firm perspective in corruption research is relatively rare.

As a result, there is no clear insight into the micro determinants of bribery behavior. Such a perspective is important because at every instance, there is an individual person making the decision to propose or accept the bribe. Consequently, the study focuses on the determinants and implications of the bribery decision. The main research question of this study can be formulated as follows: What are the causes and consequences of firm-level bribery?

One implication of this research question is that new data must be collected given that the existing databases offer country-level or industry-level information at best. To this end, I use a definition of bribery that enables collection of information from entrepreneurs in a transition economy: I define it as the payment of cash by a private organization with the aim of influencing the actions of a public official. Chapter 3 explains in detail how firm-level information was collected in one of the largest transition economies—Vietnam. This is my first contribution to the corruption literature.

Macro-level studies, offer a good understanding of the causes of country-level corruption by showing that the openness of an economy, the quality of political institutions, and legal and cultural roots are key determinants of corruption (Treisman, 2007; Wu, 2009). In contrast, irrespective of the unit of analysis, attempts to establish consensus on a model of corruption have met with limited success (Alt & Lassen, 2003). The many empirical models reviewed in this chapter have resulted in a large number of explanatory variables intended to explain corruption. Many of these models receive mixed empirical support at best and are sometimes not robust, meaning that a variable may be significant in a particular model but may lose its significance when other variables are added to the model. In line with the more recent firm-specific studies of corruption, my assumption is that firms operating within a country may vary in their propensity to pay money to government officials to get things done due to (1) factors specific to the firms or their perceptions of their environment (Chen et al.,

2008; Gavira, 2002; Svensson, 2003; Swamy et al., 2001), and (2) their relationships with government officials (network characteristics). To some extent, firm and (perceived) context characteristics have been addressed in the recent firm-level studies of corruption; however, these antecedents of corruption have not been systematically addressed or fully understood for firms in transition economies, thus presenting a conundrum. The focus on transition economies is interesting and thus can enrich corruption literature. This is because the transition process is often characterized by the changing and creating of (new) institutions that can create the potential niche for opportunistic behavior by the regulatory authorities. Accordingly, regulation-induced corruption and the high transaction costs inevitably accompany it. Further discussions on this context will be displayed in the next chapter. Therefore, Chapter 4 presents these determinants, analyzing whether and how firm-level bribery in transition economies is influenced by firm characteristics (e.g., firm size, firm age) and perceptions of the business environment (e.g., the quality of government services, level of competition). This is my second contribution to the corruption literature.

The importance of personal ties of entrepreneurs with government officials has been acknowledged but not, to the best of my knowledge, in relation to corruption, at least not explicitly. In the context of Asian countries, the development of personal relationships is considered vital for business success (Hitt et al., 2002). Personal relationships are necessary to achieve favors and eventually obtain better firm performance (Adler & Kwon, 2002). Therefore, Chapter 5 begins with the understanding that firms in transition economies operate in a business context; that is, firms are embedded in networks of personal relationships. I investigate whether and how the characteristics of these networks may determine bribery. This is my third contribution to the corruption literature.

A fourth and final contribution to the current corruption literature involves the firm-level consequences of firm-level corruption in transition economies. The relationship between corruption and performance is a subject of ongoing debate. Corruption may be detrimental to macroeconomic growth but, at least to some extent, could be beneficial as well because it may increase efficiency in the presence of policies that distort business activities, incompetent bureaucrats, and excessive regulatory barriers. The most well-known explanation for the latter effects is the “grease-the-wheels” perspective, which suggests that bribes help to reduce administrative delays (Lui, 1985). Having said that, the conclusion derived from the literature review is that the relationship between bribery and organizational performance is not well understood and deserves much more attention than it has received thus far. For that reason, Chapter 6 investigates whether and, if so, how bribery has an impact on the performance of organizations in a transition economy.

APPENDIX A Table A 2.1 Country-level determinants of country-level corruption

definition	dependent variable	source of information	Country-level determinants of country-level corruption			
			economic factors	political institution	judiciary & bureaucracy	culture & geography
American Economic Review: Ales & Di Tella (1999)						
A	BI	BI- Economist Intelligence Unit, WCR; Sample 31-186 obs	income (-); trade openness (-)	democracy, civil liberty (-)		distance to large exporter (+)
Journal of Public Economics: Treisman (2000)						
B	perception of corruption	TI, BI, ICRG	income (-); import share (-); economic freedom (-)	democracy, civil liberty (-); decentralization, federalism (+)		religious affiliation (-); ethno-linguistic heterogeneity (+); british colonial heritage (-)
Journal of Public Economics: Fishman & Gatti (2002)						
A	perception of corruption	ICRG	income (-); gov. expenditure (-); trade openness (-)	decentralization, federalism (-)		
Journal of Public Economics: Brunetti & Weder (2003)						
A	perception of corruption	ICRG	income (-)		quality of bureaucracy (-)	
Journal of Public Economics: Fan et al. (2009)						
A	perception of corruption	WB-WBES	subnational revenues (-)	decentralization (+); tiers (+)		

definition	dependent variable	source of information	Country-level determinants of country-level corruption			
			economic factors	political institution	judiciary & bureaucracy	culture & geography
Journal of Development Economics: Rijkceghem & Weder (2001)						
A	perception of corruption	ICRG			quality of bureaucracy (-); rule of law (-); relative wage (-)	
Journal of Development Economics: Swamy et al. (2001)						
A	perception of corruption	WB-WVS; graft index (Kaufman et al. 1999)	woman's share in parliament seats (-); women's share of top ministerial/bureaucratic position (-); women's share of the labor force (-); GNP (-)	political freedom (-)		former British colony (-)
Journal of Development Economics: Henderson & Kuncoro (2010)						
A	bribe payment (labor bribe & red tape bribe)	data from corruption surveys in late 2001 (1808 firms) and in early 2005 (1129 firms) in Java		local democracy (-)		secular party (+)
Journal of Development Economics: Emerson (2006)						
A	perception of corruption	TI, WB indicator, World Audit Organization	secondary school (-)	civil liberty (-)		

definition	dependent variable	source of information	Country-level determinants of country-level corruption			
			economic factors	political institution	judiciary & bureaucracy	culture & geography
European Journal of Political Economy: Herzfeld & Weiss (2003)						
A	perception of corruption	ICRG, CPI, IMD	import share (-)		government wage (-)	government wage (-)
European Journal of Political Economy: Graeff & Mehlkop (2003)						
A	perception of corruption	TI (1998-2000)	government size (-); Income (-); economic freedom (+/-)			
European Journal of Political Economy: Tavares (2007)						
B	perception of corruption	ICRG		democratization (-); undertaking both democratization & liberalization (-); liberalizations more than 5 years after democracy (+)		
Journal of International Business Studies: DiRienzo et al. (2007)						
B	perception of corruption	TI	income (-); Economic freedom (-)	digital access (-)		individualism (-); masculinity (+)

definition	dependent variable	source of information	Country-level determinants of country-level corruption			
			economic factors	political institution	judiciary & bureaucracy	culture & geography
Journal of International Business Studies: Husted (1999)						
based on Macrae's (1982) definition, corruption as an "arrangement" that involves "an exchange between two parties (the 'demander' and the 'supplier') which (i) has an influence on the allocation of resources either immediately or in the future; and (ii) involves the use or abuse of public or collective responsibility for private ends".	perception of corruption	TI	government size (+); income (-)			power distance (+); masculinity (+); uncertainty avoidance (+)

definition	dependent variable	source of information	Country-level determinants of country-level corruption			
			economic factors	political institution	judiciary & bureaucracy	culture & geography
Journal of International Business Studies: Kwok & Tadesse (2006)						
Corruption as an arrangement that involves an exchange between two parties which (1) influence on the allocation of resources either immediately or in the future; and (2) involves the abuse of public responsibility for private ends	perception of corruption	TI	FDI (-); Income (-); education (-)		rule of law (-)	power distance (-); Individualism/Collectivism (-)
British Journal of Political Science: Montinola & Jackman (2002)						
A	Perception of corruption	BI, TI	Government size (-); Income (-)	Democracy (-); government intervention (+)		
British Journal of Political Science: Kunicova & Rose-Ackerman (2005)						
the misuse of public office for private financial gain by an elected official.	perception of corruption	CPI, Graft index	income (-)	democracy, civil liberty (-); closed list system (+); decentralization, federalism (+)		

definition	dependent variable	source of information	Country-level determinants of country-level corruption			
			economic factors	political institution	judiciary & bureaucracy	culture & geography
British Journal of Political Science: Chang & Golden (2007)						
B	perception of corruption	TI	income (-)	democracy, civil liberty (-); number of party (+); closed list system (-); presidentialism (+)		religious affiliation (-)
Journal of Economic Behaviour & Organization: Baksi et al. (2009)						
B	perception of corruption	ICRG	openness (inverted-U shape)			
Strategic Management Journal: Robertson & Watson(2004)						
the abuse of public roles and resources for private benefits	perception of corruption	TI	changes in FDI (+); Income (-)			masculinity (+); uncertainty avoidance (+)
Journal of Business Ethics: Sanyal (2005)						
bribery is defined as offering, promising, or giving something in order to influence a public official in the execution of his/her official duties (OECD Observer, 2000)	perception of corruption	TI	income (-); Income distribution (-)			masculinity (+); power distance (+)

definition	dependent variable	source of information	Country-level determinants of country-level corruption			
			economic factors	political institution	judiciary & bureaucracy	culture & geography
Economics and Politics: Braun & Di Tella (2004)						
A	perception of corruption	CRG - for 75 countries in period 1982-1994	income (+/-); inflation variance (+)	political rights (political competition)(-)		
Cato Journal: Ali and Isse (2003)						
A	perception of corruption	PRS for period 1982-1990; CPI – TI for period 1995-1999; 57-78 observations	income (-); Schooling (-); Gov. expenditure(+); economic freedom (-); foreign aid (+)	decentralization, federalism (-)	rule of law (-)	
Economics of governance: Knack & Azfar (2003)						
A	perception of corruption	TI, Graft index, ICRG; CPIA; Sample 40-165	population (+)			
Economics letters: Tavares (2003)						
A	perception of corruption	ICRG-2001; 181-200 observations	foreign aid (-)			colonial past (+)
The Multinational Business Review: Park (2003)						
B	perception of corruption	TI, 85 countries published since 1995	economic freedom (-)	political instability (+)	Rule of law (-)	masculinity (+)

definition	dependent variable	source of information	Country-level determinants of country-level corruption			
			economic factors	political institution	judiciary & bureaucracy	culture & geography
Journal of the European Economic Association: Persson et al. (2003)						
More generally, extraction of political rents	perception of corruption	80 democracies in the 1990s published by Freedom house; TI, ICRG, Graft index	income (-); trade openness (-); schooling (-)	closed list system (+)		religious affiliation (-); colonial past (-)
The Journal of Law, Economics and Organization: La Porta et al. (1999)						
A	perception of corruption	a dataset of measures of government performance and their potential determinants in 152 countries; ICRG with 126 observations				religious affiliation (-); ethno-linguistic heterogeneity (+); latitude (-)
WB Policy Research Working Paper: Gurgur & Shah, 2005						
B	perception of corruption	TI (1998); sample 20-30 observations	economic freedom (-); entry barriers, competitiveness (-)	decentralization, federalism (-)	quality of bureaucracy (-)	colonial past (+)
Crime, Law & Social Change: Sung (2004)						
A	perception of corruption	TI (1995-2000) in 103 countries		democracy (+/-) (cubic)		

Country-level determinants of country-level corruption						
definition	dependent variable	source of information				
Public Choice: Serra (2006)						
			economic factors	political institution	judiciary & bureaucracy	culture & geography
A	perception of corruption	Graft index by Kaufmann et al. (1999a); TI (CPI for 62 countries in period 1997-1999)	economic development (-)	uninterrupted democracy (-); political instability (+)		British colonial heritage (-); protestant (-)
Policy Research Working Paper: Frechette (2006)						
A	perception of corruption	ICRG; 947-1168 observations in 99 countries	income (+); fuel and mineral exports (+); share of imports in GDP (-)	political freedom (-)		

BI corruption index: the degree to which business transactions involve corruption or questionable payments. Assessed from 0 to 10 by Business international's network of correspondents with 10 meaning maximum corruption

WCR (World Competitiveness Report); WCR (1990-1991). The size of the surveys is 1,800 in 1989 and 1,384 in 1990. corruption data is measured on a scale from 0 to 100 (highest corruption). The corruption question is "the extent to which improper practices (such as bribing or corruption) prevail in the public sphere.

IMD index (Institute of Management Development-World competitiveness Yearbook: based on the survey among local managers in up to 50 countries. The index is based on the extent to which improper practices (such as bribing or corruption) prevail in the public sphere, measured from 0 (most corruption) to 10 (least corruption). The index has been published since 1990.

WB-WBES: the questions are, for instance, typically measured by (1) "On average what percent of revenues do firms like yours typically pay per annum in unofficial payments to public official?"; (2) "How often do firms in my line of business have to pay some irregular "additional payments" for government officials to get things done?"; (3) corruption and crime are obstacles to doing business; (4) whether firms know in advance the value of the bribes they have to pay; (5) whether firms can count on services being delivered after paying bribes; (6) whether firms have to pay bribes not to one but to several officials; (7) whether officials from specific government offices and state-owned companies

request bribes; (8) when establishments in your industry do business with the government, how much of the contract value is typically expected in gifts or informal payments to secure the contract?; (9) Is corruption of bank officials an obstacle for the operation and growth of your business? - answer: (a)no obstacle, (b) a minor obstacle, (c) a moderate obstacle, (d) a major obstacle; (10) "It is common for firms in my line of business to have to pay some irregular "additional payments" to get things done. - answer measured by 1-6 scale (always true to never true);

WB-WBES (cont'): (11) Do firms like yours typically need to make extra, unofficial payments to public officials for any of the following? - to get licenses, to get connected to public services, etc. - answer measured by 1-6 scale (always true to never true) .

WB-WVS: a survey in dozens of developed and developing countries includes information on the attitudes and values of the people of various societies around the world. For each behaviour (dishonest or illegal), respondents are asked to place themselves on a 1-10 scale, where 1 indicates "never be justified" and 10 means "always be justified". One of the questions on bribery, e.g. is "someone accepting a bribe in the course of their duties". Three waves of the WVS are publicly available on the period: 1981-1984, 1990-1993, 1995-1997.

WB indicator: it ranges from -2.5 to +2.5. Like CPI, an increase in the index reflects a better control of corruption or a lower level of corruption.

ICRG-PRSS (Political Risk Services Inc): data is only available from 1982 to 2001. The corruption score for countries is from 0 (most corruption) to 6 (least corruption). Lower scores indicate that “high government officials are likely to demand special payments” and that “illegal payments are generally expected throughout lower levels of government” in the form of “bribes connected with import and export licenses, exchange controls, tax assessment, policy protection, or loans”. Authors usually rescale the index so that high value of index means a higher level of corruption.

TI-CPI: this index is simply an average of other indices (World economic forum, Economist Intelligence unit, International Crime Victim survey, Institute for management development, Political and Economic risk consultancy, world bank, Africa competitiveness report, political risk services) . It ranges from zero, the most corrupt situation, to ten, the least so. Most authors usually rescale this index to range from 0 to 10 (most corruption).

Graft index (Kaufmann et al., 1999): graft index is built upon on numerous underlying sources. It reports standard errors for each country estimate. Higher standard errors reflect greater uncertainty about the “true” level of corruption. Graft index is highly correlated with CPI (0.94-0.99)

World Audit Organization: it is a source for the measure of civil liberties. It is a relative ranking of all countries it lists from least corrupt to most corrupt. The level of civil liberties as a proxy for democratic freedom is served as instruments for the corruption variable.

Country Policy and Institutional Assessment (CPIA): It rates 136 countries on 20 aspects of policies and governance on a 1-6 scale. One of these items measures “corruption in public sector”. Of 136 nations covered in the CPIA corruption index, 29 (small) nations are not presented in the Graft index. By estimating Graft index data from CPIA ratings, corruption ratings for 1999 can be generated for 184 nations. Thus, Graft-CPIA refers to the Graft index values, augmented by predicted values based on CPIA ratings for those nations missing data on the Graft index.

A: cannot find the definition of corruption; B: The abuse of public power/office for private gain.

Table A 2.2. Firm-level determinants of firm-level corruption

definition	dependent variable	source of information	firm-level determinants of firm-level corruption		
			firm characteristics	institution – industry context	location - local culture
Quarterly Journal of Economics: Svensson (2003)					
A	reported bribe payment (graft or bribery)	176 out of 243 Ugandan enterprises in a survey in 1998	current (future) profit (+); alternative return to capital (-)	formal sector (+)	
Journal of Financial Economics: Barth et al. (2009)					
B	Q9	WBES (2000) - over 4,214 firms in more than 56 countries were surveyed	government or foreign ownership (-); exporting firms (-)	objective courts and better law enforcement (-); information sharing and bank competition (-)	
World Development: Safavian et al. (2001)					
A	perception of corruption	data were collected from 304 microenterprises in and around Samara City, Russia; correspondents rate the level of corruption as 1–4 scales according with 'irregular payments'	firm growth (+); income iversification (-)	monthly inspections (+)	
Journal of Business Ethics: Wu (2009)					
B	Q1; Q2	WB-WBES	small firm (+); individual owner or family (+)	competition (+); quality of legal environment (-);licensing (+); inter-pretation of laws and regulations (-); the quality of government service (-); tax (+)	

definition	dependent variable	source of information	firm-level determinants of firm-level corruption		
			firm characteristics	institution – industry context	location - local culture
Journal of Business Ethics: Collins et al. (2009)					
B	likelihood of engaging in corrupt transaction	semi-structured, in-person interviews conducted in 2003 for 352 upper-level managers in India	rationalize practice of corruption (+); social ties (+)	professional industries (-)	
Bulletin of Indonesian Economic Studies: Kuncoro (2004)					
graft or bribe as a specific form of corruption refers to the extent to which the firm engages in various forms of payments to public officials to "get things done" with regard to governmental or public services such as customs, taxes, licenses, regulations, services, etc.; the definition fits with that of WB	bribes as percentage of production costs	special survey of governance by the institute of economic and social research at the university of Indonesia- 1808 firms surveyed in 2001-2002	firm age (-)	service sector (+); time spent with officials (+); tax (+); regulatory burden (+)	oil-rich regions (+)

definition	dependent variable	source of information	firm-level determinants of firm-level corruption		
			firm characteristics	institution – industry context	location - local culture
Journal of Public Economics: Clarke & Xu (2004)					
A	Q1	WB-WBES	profit (+); de novo firms(+); overdue payment to utilities (+); firm size (-)	fixed line telecommunication privatized (-); electricity distribution privatized (-); competition (-)	
Asean Economic Bulletin: Kuncoro (2006)					
graft or bribe as a specific form of corruption refers to the extent to which the firm engages in various forms of payments to public officials to “get things done” with regard to governmental or public services such as customs, taxes, licenses, regulations, services, etc. The definition fits with that of WB	bribe paid annually as a percentage of production cost	cost of doing business survey - 2001-2003, launched by the institute of economic and social research, University of Indonesia. 1,808 firms interviewed.	firm size (-)	tax (+); time spent (+); regulatory burden (+); uncertainty (+/-); service firm (+)	city (+)

definition	dependent variable	source of information	firm-level determinants of firm-level corruption		
			firm characteristics	institution – industry context	location - local culture
Journal of World Business: Luo & Han (2009)					
graft or bribe as a specific form of corruption refers to the extent to which the firm engages in various forms of payments to public officials to "get things done" with regard to governmental or public services such as customs, taxes, licenses, regulations, services, etc.; the definition fits with that of WB	Q1	WB-WBES; more than 80 countries with over 50,000 firms, period 1999-2005.	public listing (-); foreign ownership (-); government ownership (-); exporting firms (-); leadership education (-)	overseas investment (-); local market share (-)	smaller cities (+)

A: cannot find the definition of corruption;

B: the abuse of public power/office for private gain.

Table A 2.3. Individual-level determinants of firm-level corruption

definition		dependent variable	source of information	Individual-level determinants of firm-level corruption		
				institution – industry context	Individual characteristics perception	location - culture
Journal of Economic Behavior & Organization: Guerrero & Rodriguez-Oreggia (2008)						
the abuse of (or misuse) of public power for private benefit and a deviant behavior from the formal duties of a public role because of private regarding.	bribe payment (only monetary) and individual perception	the Encuesta Nacional sobre Corrupcion y Buen Gobierno (National Survey on corruption and governance)	institution (effective law & ethical practices) (-)	blaming (-); system (+); Male (+); income (+); education (+); older (-)	regions (-)	
World Bank Policy Research Working Paper: Gatti et al. (2003)						
A	attitude toward corruption	WB-WVS & European values survey; 35 countries for a total of 33,780 individuals from 1995-1997		women (-); employed (-); older (-); less wealthy (-); family values (-)	reported church attendance (-); regional average of bribe (+)	
Journal of Business Ethics: Powpaka (2002)						
B	Intention to give bribe	the list of alumni of two major MBA programs in Thailand with 200 Thai's managers were interviewed		attitude toward bribe giving (+); subjective norm (+); perceived choice (-)		

definition	dependent variable	source of information	Individual-level determinants of firm-level corruption		
			institution – industry context	Individual characteristics perception	location - culture
Journal of Business Ethics: Rabl & Kühnmann (2008)					
corruption is deviant behavior which manifests itself in an abuse of a function in politics, society, or economy in favor of another person or institution.	perception of corruption	a survey on 196 German university students (business and non-business students) and German high school students with a special interest in business topics.		attitude toward corruption (+); subjective norm (+); the desire to act corruptly (+); intention to act corruptly (+)	
Journal of Applied Economics: Cabelkova & Hanousek (2004)					
A	perception of corruption (the way they obtain information and process it)	Kiev International institution of Sociology in a survey entitled Questions on National Integrity in 1998- 2104, with 2600 respondents.		corruption perception (+); businessmen (+); peasants (+); age (-)	big town size (-)

A: cannot find the definition of corruption;

B: the abuse of public power/office for private gain.

Table A 2.4. Multi-level determinants of corruption

definition	dependent variable	source of information	multi-level determinants of corruption			
			social economic factors and firm characteristics	institution - industrial context	Individual characteristics - perception	culture & geography
Economic Inquiry: Mocan (2008)						
A	exposure to bribery	perception - International Crime Victim Survey (ICVS); 49 countries with 55,107 - 73,040 observations	average education of the country (-); unemployment (+); population (+)	low risk of expropriation (-)	male (+); age (-); single (-); income (+); education (+)	smaller cities (-)
Academy of Management Journal: Martin et al. (2007)						
bribery is defined as deviant behavior at the organization level (anomie theory); a phenomenon of local firms supplying bribes to local officials as it relates to national context and firm-level pressures.	a dataset of measures of government performance and their potential determinants in 152 countries; ICRG with 126 observations	WB-WBES	sale (+); firm size (-)	welfare socialism (-); political constraints (-); competitive intensity (+); financial constraints (+)		in-group collectivism (-); achievement orientation (-); human orientation (-)
Journal of Business Ethics: Chen et al. (2008)						
B	Q1	WB-WBES	the average number of years of schooling for adults (-); population size (+); export (+); current sales (-); number of employees (-); dependence on public infrastructure (+)	market concentration (+)	likelihood of going to alternative authority (-)	British legal origin (-); masculinity (+)

A: cannot find the definition of corruption;

B: the abuse of public power/office for private gain.

Table A 2.5. Country-level consequences of country-level corruption

definition	dependent variable	source of information	Country-level consequences of country-level corruption		
			economic factors	industry context	propensity - behavior
A	perception of corruption	Strategic Management Journal: Brouthers et al. (2008) TI	FDI (-)		
B	perception of corruption	Public Choice: Meon & Sekkat (2005) TI, WB; 73 observations	investment (-); growth (-)		
A	perception of corruption	European Journal of Political Economy: Mendez & Sepulveda (2006) TI, ICRG, IMD	growth (invert U shape)		
B	perception of corruption	European Journal of Political Economy: Egger & Winner (2005) TI, ICRG, WB indicator	inward FDI (+)		
B	perception of corruption	World Development: Meon & Weill (2010) TI, WB indicator	growth (-)		
A	perception of corruption	Journal of Development Economics: Emerson (2006) TI, WB indicator, WAO		competitiveness (-)	

definition	dependent variable	source of information	Country-level consequences of country-level corruption		
			economic factors	industry context	propensity - behavior
A	perception of corruption	Journal of International Business Studies TI	Luo (2006)		cooperativeness (-); ethical codes (+); philanthropic contribution (-); arm's length bargaining (+)
B	perception of corruption	Journal of International Business Studies TI	Weitzel & Berns (2006) target premiums (+)		
B	perception of corruption	Journal of International Business Studies WB indicator	Cuervo-Cazurra (2006) FDI (-); FDI (+)		
B	perception of corruption	Journal of International Business Studies TI, WB indicator	Cuervo-Cazurra (2008) FDI (-)		
B	perception of corruption	Journal of International Business Studies TI	Habib & Zurawicki (2002) FDI (-)		

A: cannot find the definition of corruption;

B: the abuse of public power/office for private gain.

Table A 2.6. Firm-level consequences of corruption

definition	dependent variable	source of information	firm-level consequences of corruption		
			economic factors	institution	behavior
World Development: Vial & Hanoteau (2010)					
A	reported bribe payment	using panel data from the Indonesian manufacturing industry during the Suharto era (1975-1995), an annual survey conducted by the Indonesian Bureau of Public Statistics (BPS)	output growth (+); labor productivity growth (+)		
Emerging Markets Review: Gaviria, A. (2002)					
B	perception of corruption	WB (1997); 100 top and middle managers in 29 countries.	growth rate of sale (-)	bureaucratic interference (+)	
Asia Pacific Journal of Management: Meschi (2009)					
B	perception of corruption	TI, ICRG over the 1996-2006; a sample of 171 European firms which formed IJVs in different Asian economies during 1996			International Joint Venture termination (+/-)

definition	dependent variable	source of information	firm-level consequences of corruption		
			economic factors	institution	behavior
Policy Research Working Paper: Kaufmann et al. (2008)					
B	perception of corruption	WBI report for Peruviangovernment in 2001, andcovers over 1696households and 1123public officials		accessibility of public services (-)	
Journal of Development Economics: Fisman & Svensson (2007)					
A	reported bribe payment	a sample of 243 firms collected from the Ugandan Industrial Enterprise Survey by World Bank		sale (-)	

A: cannot find the definition of corruption;

B: the abuse of public power/office for private gain.

Chapter 3

Research context and data

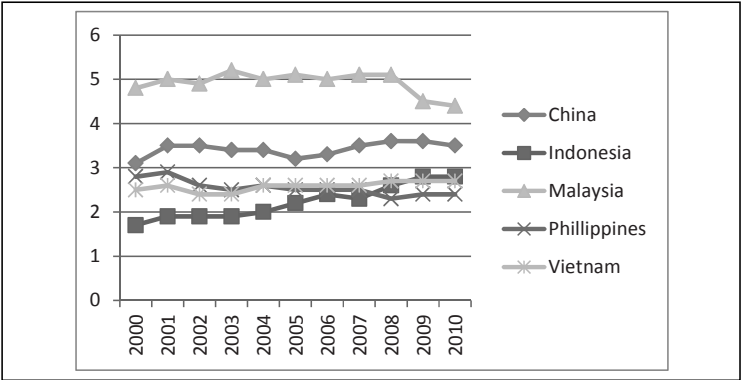
3.1 Introduction

Research indicates that corruption in transition economies is more prevalent than in developed nations (Luo & Han, 2009). A rationale is that the transition process involves a simultaneous restructuring of the state and the economy, which creates opportunities for corruption. In general, the causes of corruption in transition economies include poorly designed (economic) policies, underdeveloped legal systems, low levels of education, weak accountability of public institutions, and a lack of enforcement mechanisms. Corruption is cited as one of the most problematic factors for doing business in transition market economies (Luo & Han, 2009). Empirical evidence suggests that corruption hampers economic growth, reduces investment and income, augments inequality, and increases the volume of unofficial economic activities (Friedman et al., 2000; Johnson et al., 2000; Mauro, 1995).

A transition economy such as Vietnam offers an interesting research laboratory in which to study corruption because it has been identified as a fast-growing market (Hawksworth & Cookson, 2006) with high levels of corruption. Figure 2 illustrates that Vietnam, compared with other transition economies, has a relatively high corruption perception index (CPI) of 2.6, on average. (The CPI index ranges from 1 = the highest level of corruption to 10 = the lowest level of corruption). Meanwhile, Figure 3 indicates that Vietnam maintains a high rate of economic

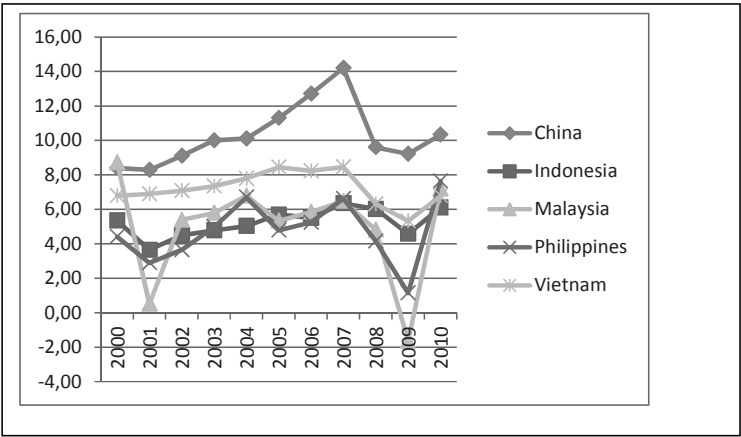
growth (measured by annual percent change in gross domestic product [GDP] with constant prices). On average, Vietnam has achieved a 7.22% growth rate for the decade 2000–2010.

Figure 3.1. CPI in transition economies



Source: Transparency International

Figure 3.2. GDP in transition economies



Source International Monetary Fund (IMF)-World Economic Outlook Database, September 2011

The purpose of this chapter is to present the research context of this study in more detail. First, I review existing data sets and measures of corruption as well as discuss their limitations. Given these limitations and lack of data, I decided to collect new data in Vietnam. That is, I constructed two different data sets and in section 3.4 I will explain the difference between these data sets and which one I use for the various empirical parts in this study. Next, I discuss the role of Vietnamese entrepreneurs and bribery. Finally, I present the data collection process used in the three empirical chapters of this thesis.

3.2 A review of existing data sources and measures

3.2.1 Data sources and measures

During the past century, various sources have collected and published corruption data. Two types of data can be categorized: (1) poll-based data (primary data) and (2) poll-of-polls-based data (secondary data). An example of poll-based data is the International Country Risk Guide (ICRG) data set, which has become popular due to its intertemporal coverage of countries. The ICRG indicator captures the likelihood that government officials will demand unofficial payments as well as expected illegal payments through government tiers. It reports data for almost 150 developing and developed countries since the 1980s. The data cover a wide range of economic, political, and financial risk indexes. Using 12 components of political risks, the guide measures corruption using a score ranging from 0 to 6, where a higher score means less corruption. The measure of corruption can be obtained from statements such as (1) “high government officials are likely to demand special payments” (Svensson, 2005) and (2) “illegal payments are typically expected throughout lower levels of government” in the form of “bribes connected with import and export licenses, exchange rate controls, tax assessment, police protection, or loans” (Egger &

Winner, 2005; Fisman & Gatti, 2002; Mendez & Sepulveda, 2006; Meschi, 2009). Thus, the data set provides information on actual and potential corruption. The latter is addressed by means of excessive patronage, nepotism, job reservations, “favors-for-favors”, secret party funding, and suspiciously strong ties between politics and business.

Second, other data and corruption measures derive from the World Economic Forum (since 1979) data set, also referred to as the Global Competitiveness Report (Ades & Di Tella, 1999; Knack & Azfar, 2003), and the World Competitiveness Yearbook (since 1987) of the Institute for Management Development (IMD). The former has expanded each year, and it now includes more than 130 major and emerging economies. It reports the perception of corruption acknowledged by top and middle-tier executives around the world. The latter is based on surveys among local managers and reports corruption for both domestic and foreign firms operating in 58 countries. Both the WCY and IMD corruption indexes refer to the extent to which improper practices in the public sphere take place. They have opposite scales: 0–10 (most corrupt) for WCR, and 0–10 (least corrupt) for IMD (Herzfeld & Weiss, 2003; Mendez & Sepulveda, 2006).

Third, the most common poll-of-polls-based data set (secondary data) is Transparency International's (TI), which as of this writing covers 150 countries. The annual TI Corruption Perceptions Index (CPI), first released in 1995, is the best known of all TI's tools. It ranks more than 150 countries according to the perceived levels of corruption as determined by businesspeople, country experts, and local population opinion surveys. It is an average of various corruption surveys' indexes (those reported by the World Economic Forum, Economist Intelligence Unit, International Crime Victim survey, IMD, Political and Economic Risk consultancy, World Bank, and Africa Competitiveness report) (Lambsdorff, 2005a, 2005b). It ranges from 0 (the most corrupt situation) to 10 (the least so). The CPI index is widely used,

though most authors usually rescale this index from 0 (least corruption) to 10 (most corruption) (Cuervo-Cazurra, 2008; Graeff & Mehlkop, 2003; Kwok & Tadesse, 2006; Meschi, 2009; Treisman, 2000).

Fourth, the often-used (Knack & Azfar, 2003; Kunicova & Rose-Ackerman, 2005) Graft index developed by Kaufmann et al. (1999) is part of the Governance Index or World Bank indicator² (Cuervo-Cazurra, 2006; Egger & Winner, 2005; Emerson, 2006; Méon & Sekkat, 2005; Méon & Weill, 2010). Like the CPI, the Graft index is also based on single perception indexes computed from surveys of business people, local citizens, or experts' opinions, using data from 11 institutional sources. It ranges from a minimum of -2.5 (lack of corruption) to a maximum of 2.5 (high corruption). It also reports standard errors for each country estimate. Higher standard errors reflect greater uncertainty about the actual level of corruption. The graft index correlates highly with CPI, with correlation coefficients between .94 and .99 (Kaufmann, et al., 1999, 2005a, 2005b). The primary differences between the CPI and the Graft index are the aggregating methodology and country coverage. The Graft index aggregates individual corruption indicators using an unobserved components model that presents corruption values coming from each source as a linear function of the unobserved component (the existing true corruption) plus a disturbance term, which reflects the perception errors and the lack of sample coincidence among individual indicators. In contrast, the CPI is constructed as a simple mean of individual sources that are standardized and equally weighted. Although the Graft index provides ratings for 155 countries in 1999 compared with 99 for the CPI index, it is important to note that

²The governance index includes six elements—namely voice and accountability, political instability and violence, government effectiveness, regulatory quality, rule of law, and control of corruption—and ranges from -2.5 to $+2.5$. Like CPI, an increase in control of corruption index reflects a better control of corruption or a lower level of corruption.

the Graft index uses ratings even if there are only one or two underlying data sources, whereas the CPI index uses ratings only if data are available from at least three underlying sources.

Fifth, another relatively new corruption indicator—constructed primarily for internal use by the World Bank and thus not available for outside researchers—rates every member country that is an active borrower. As part of the World Bank’s annual Country Policy and Institutional Assessment (CPIA), it rates 136 countries on 20 aspects of policy and governance on a six-point scale. One of these items measures “transparency, accountability, and corruption in the public sector”. Despite its advantages (e.g., that is the country coverage of the CPIA index is independent of country size), scholars suggest that errors in measurement are more than that of the TI and Graft indexes, which aggregate information from numerous sources (Knack & Azfar, 2003).

Sixth, the Business International (BI) Corporation, which is part of the Economic Intelligence Unit, also reports levels of corruption in various countries with a focus on which business transactions involve corruption or questionable payments. It uses a data set based on a worldwide network of correspondents and analysts and was first published for the period 1981–1983. The BI corruption index is scaled from 0 (minimum corruption) to 10 (maximum corruption) (Ades & Di Tella, 1997; Mauro, 1995).

Seventh, the World Business Enterprise Survey (WBES) has recently attracted much attention from scholars studying corruption at firm level (Barth et al., 2009; Chen et al., 2008; Clarke & Xu, 2004; Fan et al., 2009; Luo & Han, 2009; Martin et al., 2007; Wu, 2009). The WBES for Eastern Europe and Central Asian countries are also known as the Business Environment and Enterprise Performance Surveys (BEEPS). They are jointly conducted by the World Bank and the European Bank for Reconstruction and Development. For most countries,

this survey has been conducted approximately every three to four years since 2002. The manufacturing and services sectors are the primary business sectors of interest. Formal (registered) firms with five or more employees are targeted for interview. However, state-owned firms are not considered eligible for interviews. Most WBES questions are measured by percentages or Likert scales on statements such as the following: (1) “On average, what percent of revenues do firms like yours typically pay per annum in unofficial payments to public official?” (2) “How often do firms in my line of business have to pay some irregular additional payments for government officials to get things done?” (3) “It is common for firms in my line of business to have to pay some irregular additional payments to get things done.” (Answers to question 3 are measured on a six-point Likert scale ranging from “always true” to “never true”.)

The eighth and final sources of corruption data are the World Value Survey (WVS) (Gatti et al., 2003; Swamy et al., 2001), established in 1981 and running through 2008, and the World Audit Organization (WAO) (Emerson, 2006). The former reports survey results of dozens of developed and developing countries, and includes information on the attitudes and values of the citizens. For each type of behavior, such as dishonest or illegal actions, respondents are asked to place themselves on a 1–10 scale, on which 1 indicates the statement is never justified, and 10 indicates that is always justified. The question on bribery prompts the respondent to review the sentence, which involves someone accepting a bribe in the course of their duties. The WAO is a source for corruption measures in civil societies. It is a (relative) ranking of all countries listed from least corrupt to most corrupt. The level of civil liberties as a proxy for democratic freedom serves as a measure of corruption.

The aforementioned data sources have been used to measure corruption in a great number of studies. Some scholars show levels of corruption (Fisman & Svensson, 2007; Guerrero & Rodríguez-Oreggia, 2008; Henderson & Kuncoro, 2010; Svensson, 2003; Vial & Hanoteau, 2010), whereas others measure corruption by individual perception (Cabelkova & Hanousek, 2004; Gaviria, 2002; Guerrero & Rodríguez-Oreggia, 2008; Kaufmann et al., 2008; Rabl & Kühlmann, 2008; Safavian et al., 2001), the attitude toward corruption (Gatti et al., 2003), the intention to give bribes (Powpaka, 2002), the likelihood of engaging in corrupt transaction (Collins et al., 2009), or the number of corrupt activities (Del Monte & Papagni, 2007).

The studies on the determinants and consequences of corruption have three common features (Bardhan, 1997; Mauro, 1995). First, most of them are based on cross-country analyses. Second, they apply a data set with subjective perceptions of experts with the assumption that the indexes correlate with underlying, actual levels of corruption. Indeed, the three most commonly used indexes of perceived corruption are based on the subjective evaluations of experts: the CPI of TI, a rating of control of corruption published by a team led by Kaufmann at the World Bank, and the ICRG data produced by the Political Risk Service. Third, corruption is perceived to be predominantly determined by a country's political institutional environment (Kaufmann & Wei, 1999). In addition, the use of cross-country data and perception indexes seems feasible because of limited costs of collecting quantitative data on bribery.

3.2.2 Limitations of existing data sources

Although the data sources mentioned previously have been used in publications in leading journals in economics, political science, and sociology, their limitations are nevertheless evident (Knack, 2006). First, perception indexes may create a bias problem because they do not measure

corruption itself but only opinions of issues of which respondents may not have any direct knowledge. Such a perception index is typically constructed from the opinions of a few experts per country, and its quality depends heavily on the knowledge of these experts in the countries. Furthermore, they involve of perceptions of activities that are the hidden and thus largely unobservable. It seems that perceptions about corruption are formed more by what people believe may generally occur but less so by what is personally experienced (Razafindrakoto & Roubaud, 2005). Recent empirical evidence has shown that perceptions are a poor reflection of the prevalence of corruption practices (Abramo, 2008; Olken, 2007). For example, one of the most cited studies, Mauro (1995), finds that perceived corruption hampers economic growth through its effects on investments, but he found weak evidence about the ongoing effects of corruption on increased costs or decreased productivity.

Second, issues involving the aggregation of sources by Transparency International and the World Bank have been raised (Treisman, 2007). Constructing each index may be problematic because they use different individual sources and it is difficult to compare surveys. For example, some sources are based on evaluations by Western experts; others are the opinions of international businesspeople or country inhabitants. Some report the frequency of bribes, the amount of bribes, certain regions' bribery levels, or high-level (grand) government corruption, whereas others focus on the burden imposed on the economy. Therefore, it may be difficult to understand what exactly the average is measuring; in other words, choosing specific components for particular cases may be more effective in determining the quality of the measurement or the reliability of the outcomes rather than using only one index. In addition, the comparability of responses across countries may be biased; for example, the perception of the local people may

differ in the interpretation or evaluations of corruption. Because of the aggregate nature of the data, they offer little information about the corruption of individual agents.

Third, perception data are the only publicly available information on corruption levels. There have been efforts to create new proxies for measuring corruption in specific contexts; however, only a few scholars have been able to establish objective data. For example, Di Tella & Schargrodsky (2003) report that a reduction in prices paid by hospitals in Buenos Aires during an anticorruption campaign relates to the scale of kickbacks. An index of corruption constructed by Golden & Picci (2005)—who compare the present stock values of infrastructure and previous infrastructure spending in Italy—also measures corruption more objectively because it relies on data. Others have attempted to replace perceived corruption with measures such as convictions for corruption, rates of prosecution, or abuse of office. However, the latter measures may undermine their validity. They seem to reflect the capability and the integrity of the police or judiciary system rather than to capture the actual scale of the corruption phenomena.

More recently, new measures from Transparency International's Global Corruption Barometer (GCB) surveys, the World Bank Enterprise Survey (WBES), and United Nations Interregional Crime Research Institute's (UNICRI) crime victims' surveys have become available. These measures do not concentrate on experts and public opinions about the pervasiveness of corruption but on personal experience with corruption. For example, the WBES asks business managers about their own experience with corruption. This method may create less bias from impressions garnered from the media (Cabelkova & Hanousek, 2004; Rossi et al., 2004) and prejudices than that of the more subjective survey questions. However, ongoing debates around this measurement method arise because the information of the experience of corruption collected may lead to problems such as accuracy, selective memory, and fear of

officials' "revenge". Not surprisingly, scholars have raised the issue of whether there is a correlation between the subjective indexes and experience-based indicators (GCB, WBES, and UNICRI). The results report that there is a high correlation between them, with correlation coefficients between .6 and .8 (Treisman, 2007).

In summary, existing data sources and measures have limitations. Furthermore, the existing data do not offer sufficient opportunities to measure all constructs needed for this study. Therefore, to answer my research questions, I decided to collect new firm-level data using two business surveys in Vietnam. With these new data, I aim to circumvent three limitations mentioned previously. First, the data are directly collected from the entrepreneurs. Second, entrepreneurs are directly asked the amount of money used for bribery. Third, my aim is to obtain a sufficient number of observations in a transition economy—that is, Vietnam. The following sections describe the research context and data collection procedure, respectively.

3.3 Research context

Among the transition economies, Vietnam is one of the least studied. It offers a worthwhile research context, in that it is an extreme case: It lacks formal market institutions, but it nevertheless reports a robust growth of de novo private firms (Heberer, 2003). According to the General Statistics Office of Vietnam, for example, the share of private firms increased from 22.9% in 2000 to 32.1% in 2005.

The country is the third largest transitional economy after China and Russia, with 80% of its population of more than 80 million people living in rural areas (Masina, 2006). Despite rich natural resources, Vietnam is a poor country with per capita GDP of US\$832 (in 2007). The war for independence against the French stretched from the late 1950s to the early 1960s, leading to

the division of the country into North Vietnam and South Vietnam. This was soon followed by the war against the United States, which continued until the country was reunited in 1975. Under the reign of the Vietnamese Communist Party, Vietnam's economy was modeled as a centrally planned economic model. This was not successful, and by the mid-1980s, Vietnam was close to bankruptcy after withdrawal of Soviet assistance and several years of conflict with China. Before the mid-1980s, essentially all economic activity in Vietnam was undertaken by state firms or cooperatives. The transition to a market economy began in 1986 with a series of economic reforms (*doi moi*). Most important, under state supervision, entrepreneurship was encouraged. However, although the number of de novo private firms increased rapidly, the proportion of low-performing private firms also increased. According to the General Statistics Office of Vietnam, the share of low-performing private firms of the total private firms increased from 18.77% in 2001 to 22.68% in 2003 (private firms include collectives, sole proprietorships, limited liability companies, joint-stock companies with capital of the state, and joint-stock companies without capital of the state).

Along with other Asian countries, Vietnam has a reputation for bribery; for decades it has been among the top ten of the most corrupt countries (World Bank, 2000). The Vietnamese government has made many attempts to limit bribery by means of legislation, sentencing offenders to long periods in prison and even imposing the death penalty (Johnson, Kaufmann, McMillan, & Woodruff, 2000). Nonetheless, bribery continues to exist. There are at least three explanations for its persistence. First, bribery tends to take place in secret; no contracts are written, making it difficult to detect in the first place (Bardhan, 1997). There are many cases in which bribery is mutually beneficial, which fosters tacit collusion between the participants.

Furthermore, policy measures aimed at detecting and correcting bribery must be sustained over long periods of time to be credible. The campaigns in Vietnam are usually ad hoc and induce bureaucrats to direct bribery transactions toward lower-detection activities (McMillan & Woodruff, 2003). In addition, the content of antibribery regulation in Vietnam is often of low quality and complex. The resulting difference between “law on paper” and “law in reality” has often created more rather than fewer opportunities for bribery.

Second, those who complain may, in turn, become the subject of retaliatory measures themselves. Many Vietnamese do not feel guilty about their own personal attempt at bribery (Masina, 1996). Close family and business structures are an integral part of Vietnamese society. It is widely accepted that these social relationships must be fostered through favors, gifts, or hospitality such as invitations to restaurants or karaoke bars. Those who oppose bribery become outcasts in a society in which bribery has become an ever-present and accepted phenomenon that extends throughout all areas of life (Heberer, 2003).

Third, Vietnam is a growing and strongly decentralized economy. Its advanced system of permits and licenses especially affects entrepreneurs because their activities need government approval. As the economy expands and becomes more complex, public officials see more opportunities to make money (Bardhan, 1997). Agencies, ministries, and local governments have broad autonomy to introduce their own regulations. Subsequently, they all set their bribes to maximize their private revenues. Thus, bribery also persists because of a decentralized local government with badly trained and poorly paid bureaucrats who operate in a poorly developed institutional framework and use all power at their discretion to maximize their income.

I chose Vietnam as the research context for this study for several reasons. First, it offers an interesting research laboratory because, as mentioned previously, it paradoxically combines

economic growth with corruption. The paradox here is that corruption is often perceived to inhibit economic growth and lower investments. This paradox may result from unexplored determinants of bribery in macro-level or country-level studies. This study therefore aims to add novel insights into the causes and consequences of firm-level bribery to macro-level studies.

Second, despite market reforms, Vietnam continues to report a weak formal institutional framework, which remains a major obstacle for firms (Meyer & Nguyen, 2005). Firms are confronted with a high degree of uncertainty in the Vietnamese business environment (Boisot & Child, 1996). Although the number of small- to medium-sized enterprises (SMEs) increased significantly, many firms are small, informal, short-term oriented companies that often have insufficient reputational capital and typically lack government support as well as market legitimacy compared with state-owned enterprises (Le & Nguyen, 2009; Li & Zhang, 2007; Xin & Pearce, 1996). The dual government mechanism in transition economies (i.e., a market economy and a government-led redistributive regime) implies that government officials at all levels still have considerable power to influence business practices (Boisot & Child, 1996; Li & Zhang, 2007) and resource allocations (Mallon, 2004; Meyer & Nguyen, 2005). Vietnam, like other emerging economies such as China, Taiwan, and Eastern European countries, is no exception (Le et al., 2006; Smallbone & Welter, 2001). Furthermore, the local state officials' attitudes toward the private sector vary greatly (VNCCI-VCCI, 2005). The attitude toward entrepreneurship is an important factor because it demonstrates whether a society accepts or tolerates entrepreneurship and thus affects entrepreneurial response (Welter & Smallbone, 2011). For example, the four main state-owned banks account for approximately 80% of total Vietnamese bank assets and prefer to support state-owned enterprises rather than entrepreneurs, who often have insufficient reputational capital and are therefore considered high-risk borrowers

(Masina, 2006). The costs and delays of setting up a business are on average much higher in transition economies. In Vietnam, an official application takes nearly six months and can cost 150% percent of per capita GDP in government fees (McMillan & Woodruff, 2003).

Third, in Vietnam, the coexistence of the new law-based state and socialist legality has created problems in three areas: legislative framework, the coordination of the legal framework, and the implementation of the legal framework. The National Assembly is responsible for drafting primary legislation, while ministries and People's Committees at local government or province level are allowed to draft subordinate legislation, such as the decrees, decisions, and instructions that guide the implementation of the laws. In general, the quality of subordinate legislation is low, and the implementation of legislation is not supervised and controlled by central government (Webster, 1999). Consequently, administrators at different levels have considerable discretionary power to approve (business) projects and allocate resources (Mallon, 2004; Meyer & Nguyen, 2005). This discretionary power allocated to public officials can be arbitrarily used and manipulated. To put it differently, despite the formal allocation of rights and responsibilities among central government, city, and province levels, there exist inconsistencies and overlap between higher-level and lower-level subordinate regulation. In addition, the overlapping responsibilities and poor cooperation of authorities provide considerable autonomy to local public officers and create the opportunity to manipulate rules and request bribes, particularly when private firms are involved. As a result, entrepreneurs in Vietnam face barriers in a broad range of policy, administrative, and institutional areas (Swierczek & Thanh Ha, 2003). Compared with state-owned enterprises, privately owned SMEs receive little support from the government and typically lack market legitimacy (Li & Zhang, 2007; Nguyen et al., 2005; Xin & Pearce, 1996).

3.4 Data collection procedures

This study applies two data sets collected by means of two business surveys. Much anecdotal and case-study evidence of bribery in Vietnam is available (Heberer, 2003; Masina, 2006; WorldBank, 2000). Case studies help identify and explore processes, and for that reason, many bribery studies have used this method to investigate particular bribery-related events. These studies have shed light on the structure and methods of bribery. Using case studies, researchers have revealed insights into the origin, flow, and process of network-based bribery and the role of bribery methods such as red-envelope, adult entertainment, and power exchange. Notwithstanding the importance of case studies, they focus on single events and therefore lack the scope needed to generalize findings, determine correlations, and discuss causalities. This study intends to move beyond case-study literature and to collect firm-level information for a sample of companies. Although the survey method has limitations, the data provide the opportunity to develop insight into both factual information and subjective interpretations involving the role of bribery in entrepreneurial performance and the role of firm characteristics, context, personal networks, and entrepreneurial characteristics in relation to bribery.

The data used in this study were collected using extensive surveys in (1) 6 provinces in 2004 and (2) 14 provinces in 2009, both in South Vietnam. The data were collected using face-to-face interviews with 606 entrepreneurs in 2004 and 201 entrepreneurs in 2009. The interviews and data obtained enabled me to analyze the relationship between key constructs and bribery activities. The data collection methods in both surveys are the same (see below) but there are also differences that materialize in a different use of the datasets in this study. The data from the first survey of 606 entrepreneurs in 2004 allow to study the role of forces in bribery (Chapter 4) and the relationship between bribery and performance (Chapter 6). The second data set, of 201

entrepreneurs in 2009, allow studying the network perspective of bribery presented in Chapter 5. The two surveys and the datasets that result from these differ in the number of observations and the number and type of questions included in each of them (see Appendix C1, C2 for the surveys). As a result, the data cannot be pooled into one dataset nor can the theoretical models be tested in both datasets. However, as said, the data collection procedure was the same in both surveys and this will be presented below.

In Vietnam, secondary data can be easily collected for each province using local administrative offices such as those involving statistics, investments, and taxes; however, these data are often aggregated and thus are not applicable at the firm level. For this reason, the key activities of this research project included the design and implementation of a large-scale business survey to collect firm-level information. Such business surveys are rare in Vietnam, which means that business managers may not be accustomed to providing confidential business information to outsiders or providing opinions on Likert-scale-rated questions (Aidis & van Praag, 2007).

The research proceeded in three stages. In the preparatory phase of the fieldwork, I revised an existing business questionnaire (Le, 2003), discussing it with researchers and business practitioners and consulting other business questionnaires. Next, I implemented several pilot surveys in two provinces of the Mekong River Delta (MRD), namely, Can Tho and Kien Giang. This resulted in several modifications to the questionnaire, such as adding 27 more questions. In addition, I learned that personal interviews would be the best strategy for collecting firm-level data in Vietnam, for two reasons. First, given the sensitive nature of some of the questions (e.g., bribery, revenues), I expected a high level of nonresponse from a mail survey. (Using computerized Internet surveys was not a feasible alternative at the time of the survey in

Vietnam.) Personal contacts are pivotal in the Vietnamese (business) culture. Bribery, for example, is a well-known phenomenon and to some extent a subject for debate—but only in personal conversation. Second, the secondary data's reliability was questionable because it was not up-to-date, especially with respect to the number of newly established firms, mergers, and changes of ownership type. Therefore, I decided that a personal interview with business managers would be the best strategy to collect the required data.

In the second stage, a team of interviewers was trained, which consisted of teachers and students from the School of Economics and Business Administration, Can Tho University, Vietnam. The selected interviewers were required to have experience in conducting surveys and were trained on the key topics of the survey. They were also made aware of the importance of the data they would be collecting for the university, with the intention of motivating them to take personal responsibility for the data collection as a means of improving data quality. In general, the interviewers were younger than the participants and thus did not pose a threat to the entrepreneurs. In addition, the interviews were conducted in the local dialect of Vietnamese, enabling interviewees to respond to more easily and provide more precise answers.

In the third stage, intensive interviews were conducted with (1) entrepreneurs from 606 firms identified in 6 of the 13 provinces of the MRD (one of which had recently been reclassified) in 2004 and (2) entrepreneurs from 201 firms identified in 13 provinces of the MRD, Ho Chi Minh City, and the Binh Duong province in 2009. Ho Chi Minh City and the Binh Duong province are located in southeastern Vietnam. The reason for concentrating on the MRD, Ho Chi Minh City, and Binh Duong was that they have shown a significant increase in the number of private firms in recent years, the performance of which is differently reflected in profits. In addition, the key role of private firms in this region contributes greatly to the GDP of

the entire country. The provinces surveyed in 2004 were Kien Giang, An Giang, Dong Thap, Can Tho, Vinh Long, and Soc Trang. In 2009, the provinces in MRD were Kien Giang, An Giang, Dong Thap, Can Tho, Vinh Long, Soc Trang, Ben Tre, Bac Lieu, Long An, Tien Giang, Tra Vinh, Hau Giang, and Ca Mau. For cost efficiency reasons, the interviewers' efforts were concentrated in these provinces: The density of firms is the greatest in these provinces.

A sample was not selected before the interviews; rather, it was selected on the basis of those entrepreneurs willing to cooperate³. The interviewees were either the owners or the persons who directly managed the company, defined in this research as "entrepreneurs".⁴ Demographic studies in advanced economies tend to focus on the role of the top management team because many companies are large and are supervised by teams. In Vietnam, however, the entrepreneur is the most appropriate unit of analysis because decision-making power is predominantly centralized in the hands of this person, especially when the person is also the owner, as is often the case. The entrepreneur has the power to make final decisions and has a direct impact on any strategy.

If the prospective interviewees agreed, the interviewers began to interview them; if the interviewee refused, the interviewer apologized and proceeded to the next firm. The questionnaire was conducted only if the owner was available to answer personally so that

³ The sample selection method may possibly create biases. Nevertheless, the exploratory nature of the study may legitimize the approach as a first step (e.g. snow balling survey methods).

⁴ We take a broad view of entrepreneurship, focusing on not only the creation of new business organizations but also the generation of new economic opportunities (Casson, 2003). A person can be said to engage in an entrepreneurial venture if he or she perceives and creates new products, services, organizational schemes, or product market combinations and introduces his or her idea in the market in the face of uncertainty and other obstacles by making decisions on location, form, and the use of resources and institutions (Wennekers & Thurik, 1999). All respondents meet these criteria. All private firms in the sample are de novo enterprises and not ad hoc spinoffs from state firms.

complete and correct information could be obtained. If the prospective interviewees were absent, the interviewer left the questionnaire and requested a new appointment. At the beginning of the interview, the interviewers showed their university employee card and an introduction letter from the dean of the university that, among other things, ensured full anonymity of the company and information provided. During the interview, the main topics (e.g., work experience, education, investment, loans and industry context, bribery, personal ties, opinions about bureaucratic burdens) were discussed. Some extra questions were added to invigorate the interview and enable the respondents to tell their own story. To collect information on the respondent's social contacts—the topic of research in Chapter 5—the egocentric network approach was used. This approach is widely used in entrepreneurship and small business research (Marsden, 1987). The respondents (focal ego) were asked to provide information about existing ties (alters) and to judge the characteristics of ties linking egos to alters (i.e., the quality of ties).

3.5 Sample characteristics

This approach in both surveys resulted in satisfactory response rates. We contacted approximately 1000 prospective firms and obtained 606 useable responses in 2004 and contacted 300 prospective firms and obtained 201 useable responses in 2009. On occasion, these samples were missing observations for particular items. For the regression analysis, I deleted all observations with missing values on any questionnaire item. This resulted in a conservative data set with 395 full observations in 2004 and 111 full observations in 2009, resulting in an effective response rate of 40% in 2004 and 37% in 2009. These response rates are considered adequate for analysis and reporting (Aidis & van Praag, 2007). The reasons for not participating in the

surveys included not wishing to disclose information, being too busy, or feeling uncomfortable when being asked about the business.

As can be observed from tables B1 and B2 in the Appendix B both the 2004 and 2009 samples contain missing observations for particular items. It was decided to delete all observations with missing values for any questionnaire items in order to attain a complete sample. I prefer to work with a conservative dataset albeit that bias may exist because I exclude cases for which (partial) information is lacking. In addition, all variables were checked for outliers, which further reduced the number of observations included in the analyses of chapters 4, 5 and 6. More specific, for the 2004 sample used in Chapter 4, cases were deleted that based on their z-scores, were identified as outliers. This applied to six observations for the bribery variable. In addition, six observations were deleted to exclude the collective ownership type. All in all this resulted in a sample used in chapter 4 that included 352 observations that are used for the regression analysis. Similarly, in chapter 5 111 observations out the 201 observations resulted for regression analysis. Finally, for chapter 6, based upon the 2004 sample, these procedures resulted in 395 observations to be used in the analysis.

The descriptive statistics (means, standard deviations and correlations among variables) of the two original data sets are included in Appendix B. As has been explained above, these descriptive statistics provide a first illustration of the characteristics of the data. A more detailed analysis is hampered because of the large number of missing observations and the existence of outliers for several variables. For that purpose, the descriptive statistics of the data used are more relevant. More specific, the descriptive statistics (means, standard deviations and correlations among variables) of the 2004 dataset are in Tables 4.1, 4.3 and 6.1. The descriptive statistics for the 2009 dataset are in Table 5.1. Three brief remarks about the datasets – in the

order of the chapters – are worthwhile making. First, of the 352 observations for 2004 analyzed in Chapter 4, 76% (268) reported that they did not pay bribes. According to our data, the yearly average amount of bribes paid by firms reporting positive bribes was VND 30.05 million (US\$1,905.50). About 70% of the companies in our sample have fewer than 10 employees, and 26% have 11 to 50 employees. On average, the age of the firms is 7.44 years. On average, the companies in our sample report to have 35.93 competitors. Of the respondents, 58.52% reported that the quality of the government in terms of efficiency is high or very high. In preparation for the regression analysis, I performed the customary tests (e.g., tests for heteroscedasticity and multicollinearity), to obtain reliable estimates. Note that for this 2004 sample used in Chapter 4, I first deleted cases that, based on their z-scores, were identified as outliers. This applied to six observations for the bribery variable. I also deleted six observations for the collective ownership type. Afterwards, I removed all observations with missing values resulting in the 352 observations that are used for the regression analysis. Second, of the 111 observations (for 2009) analyzed in Chapter 5, 60% (95 firms) reported that they did pay bribes. According to our data, for the firms reporting positive bribes, the yearly average amount of bribes that firms paid was VND 94.03 million (US\$5,273.10 with the 2009 official exchange rate of VND17,832 to US\$1). On average, 87.56% reported that the quality of the ties with government officials that entrepreneurs have are from good to very good. On average, 91.28% reported that the ties with local government officials of a (very) good quality. The average network diversity score of 0.98 implies that the companies in our sample on average have a heterogeneous network. Hence, almost all managers have ties with different groups. In preparation for the logit regression analysis performed in this chapter, I conducted the customary tests (e.g., tests for multicollinearity or the Hosmer-Lemeshow test for goodness-of-fit). These tests reported that the

estimates are reliable and the logit model applied in Chapter 5 is suitable. Third, of the 395 observations for 2004 analyzed in Chapter 6, 75% (297 firms) reported that they did not pay bribes. For the firms reporting positive bribes, the yearly average amount of bribes that firms paid was VND 60.2 mill (US\$ 3,815). The yearly untransformed average volume of sales in the sample was VND 4,522 billion (US\$ 270,290). In preparation for the regression analyses, I also performed the customary tests for the dataset used in Chapter 6 to obtain reliable estimates (such as tests for non-normality test, heteroscedasticity and multicollinearity). These tests reported satisfactory results, indicating that the estimates are reliable. In addition, I used the natural logarithm of the firm's total revenues in 2004 in order to obtain a normal distribution.

Although often, survey research collects data from secondary data sources on simple but key characteristics, such as firm size and turnover, and applies bivariate tests to determine whether significant differences between the sample and nonrespondents exist, this information was not available for this data set. Therefore, I could not perform sample bias tests. As a second-best but commonly applies solution, I applied Harman's (1967) single factor test to assess whether or not my data feature significant common variance (Chang et al., 2010; Podsakoff & Organ, 1986; Podsakoff et al., 2003). For the first survey, unrotated factor analysis using the eigen-value-greater-than-one criterion revealed six factors with the first factor explaining only 12.64% (substantially below the 50% threshold value for this). For the second survey, unrotated factor analysis using the eigen-value-greater-than-one criterion revealed five factors with the first factor explaining 47.30 % (also below the 50% threshold value). If a substantial amount of common-method variance were presence, the factor analysis would have resulted in a single factor accounting for the majority of the covariance among the variables. So, in my case, it is unlikely that the findings can be attributed to common-method bias. Although this contributes to the

exploratory nature of our research, I believe that the quality of the survey, the interview process, and the substantial number of respondents ensures sufficient confidence in the quality of the data sets (Coviello & Jones, 2004).

3.6 Conclusions

This chapter justifies the research context, samples, and methods for the thesis. Among the transition economies, Vietnam provides an interesting research case because the success of entrepreneurs in societies such as Vietnam is often derived from their own competencies and through their connections with bureaucrats. For example, ties with public officials in an overregulated environment and with bureaucratic constraints are important for entrepreneurs to gain access to scarce resources or to enter closely regulated industries. In such a context, bribery may be an investment entrepreneurs make to overcome burdens and get things done.

Thus, I determined that existing data sources and measures have considerable limitations and provided insufficient opportunities to measure all firm-level constructs of interest. Therefore, the research team conducted two extensive business surveys of Vietnamese entrepreneurs, one in 2004 and one in 2009. These data offer opportunities to measure the construct as well as perform appropriate regression analysis. The two datasets are collected with the same data collection method but derive from questionnaires with different items and scales and can therefore not be pooled. I will use the 2004 data for my analysis of external and internal forces in Chapter 4 and for the relationship between bribery and firm performance in Chapter 6. I will use the 2009 data for my analysis of firm networks and bribery in Chapter 4.

Appendix B Descriptive statistics

Table B.1 The 2004 survey n= 606 (sample is used in Chapter 4 & 6)

Question	Variable	Mean	Std. Dev.	Min	Max	Missing
C1.12	Bribery	17.02	109.95	0	1944	100
C1.7.7	Sales (VND mill)	8,002.25	65,252.84	0	1,110,000	21
C1.4	Formal education	10.67	2.63	1	13	15
C1.5	Informal education	1.03	2.61	0	16	54
C1.6	Work experience	8.36	7.07	0	44	93
C1.1.1	Sole proprietorship	0.52	0.50	0	1	0
C1.1.2	Limited liability	0.12	0.32	0	1	0
C1.1.3	Joint-stock	0.02	0.15	0	1	0
C1.10.1	Electricity cuts	2,646.96	43,708.13	0	1,000,000	80
C1.7.8	State bank debt	1,156.31	12,773.52	0	240,000	1
C1.2	Trade	0.50	0.50	0	1	3
C1.2	Services	0.15	0.36	0	1	3
C1.7.1	Firm size	25.63	152.76	1	2500	15
C1.3	Firm age	7.59	7.54	0	62	0
C1.8	Competition	2.90	0.91	1	4	5
C1.11	Government quality	2.51	0.88	1	4	15
C1.9	Competition (number of competitors)					
		32.02	77.68	0	1200	64

Table B.2 The 2009 survey n= 201 (sample is used in Chapter 5)

Question	Variable	Mean	Std. Dev.	Min	Max	Missing
C2.12	Bribery	94.03	548.23	0	5000	42
C2.10	ties with local gov. officials	3.82	0.97	1	5	6
C2.10	ties with gov. officials	3.81	0.96	1	5	8
C2B.7; C2.9	network diversity	0.98	0.01	0.94	1	0
C2.7; C2.8	change in member status	-0.08	0.58	-3	3	27
C2.13	bribe enforcement	3.49	0.85	1	5	27
C2.14	business license	2.51	0.89	1	5	8
C2.5	manager's age	44.23	9.39	22	70	6
C2.6	gender: male	0.84	0.37	0	1	2
C2.4	manager's education: diploma					
	economics	0.42	0.49	0	1	2
C2.1	firm life cycle: start-up	0.24	0.43	0	1	2
C2.2.6	firm ownership (sole proprietorship)					
		0.33	0.47	0	1	9

Table B3.1 Bivariate correlation of 2004 sample variables (Key variables of Chapter 4)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1.Bribery	1.00													
2.Firm size	0.09	1.00												
3.Firm age	-0.07	-0.03	1.00											
4.Competition	0.11	0.01	0.05	1.00										
5.Government quality	-0.11	0.04	-0.12	-0.13	1.00									
6.Formal education	0.11	0.08	-0.26	-0.04	-0.02	1.00								
7.Informal education	0.18	0.31	0.06	-0.02	0.00	0.08	1.00							
8.Sole proprietorship	0.06	-0.03	-0.09	0.02	0.05	0.01	0.04	1.00						
9.Limited	0.14	0.01	-0.19	-0.03	0.04	0.18	0.05	-0.37	1.00					
10.Joint-stock	0.11	0.29	-0.02	-0.03	-0.05	0.13	0.18	-0.16	-0.06	1.00				
11.Electricity cuts	0.09	0.67	-0.02	-0.01	-0.03	0.03	0.02	-0.04	-0.02	0.27	1.00			
12.State bank debts	-0.02	0.59	-0.04	-0.01	0.10	0.06	0.22	-0.01	0.07	0.05	0.06	1.00		
13.Trade	-0.01	-0.11	-0.18	-0.12	0.07	0.17	-0.01	0.06	0.01	-0.05	-0.05	-0.02	1.00	
14.Services	0.15	0.02	-0.12	-0.02	0.06	0.05	0.06	0.01	0.08	0.09	-0.02	0.00	-0.43	1.00

Table B3.2 Bivariate correlation of 2004 sample variables (Key variables of Chapter 6)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1.Firm performance (Sale)	1.00										
2.Bribe	0.00	1.00									
3.Work experience	0.08	-0.01	1.00								
4.Formal education	0.08	0.10	-0.17	1.00							
5.Informal education	0.27	0.05	0.02	0.08	1.00						
6.Firm age	0.04	-0.07	0.65	-0.26	0.06	1.00					
7.Firm size	0.67	0.02	0.09	0.08	0.31	-0.03	1.00				
8.Ownership (sole proprietorship)	-0.05	-0.04	-0.09	0.01	0.04	-0.09	-0.03	1.00			
9.Services	-0.03	0.03	-0.09	0.05	0.06	-0.12	0.02	0.01	1.00		
10.Trade	-0.06	0.04	-0.19	0.17	-0.01	-0.18	-0.11	0.06	-0.43	1.00	
11.competition	0.05	0.04	0.07	0.02	0.02	0.03	0.06	0.07	0.00	0.03	1.00

Table B4 Bivariate correlation of 2009 sample variables Key variables of Chapter 5

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1.bribery	1.00											
2.ties with local gov. officials	-0.06	1.00										
3.ties with gov. officials	0.09	0.77	1.00									
4.network diversity	-0.04	-0.16	-0.19	1.00								
5.change in member status	0.03	0.07	0.06	-0.39	1.00							
6.bribe enforcement	-0.14	0.19	0.19	0.01	-0.06	1.00						
7.business license	0.15	0.03	0.01	0.00	0.07	-0.29	1.00					
8.manager's age	0.01	0.06	0.07	0.06	0.12	0.11	0.00	1.00				
9.gender: male	0.06	-0.04	-0.04	-0.03	0.02	-0.12	-0.05	-0.06	1.00			
10.manager's education: diploma economics	0.14	0.01	0.05	-0.13	0.04	0.20	0.04	-0.09	0.05	1.00		
11.firm life cycle: start-up	-0.06	0.06	0.08	0.04	-0.16	-0.04	-0.05	-0.29	-0.06	-0.11	1.00	
12.firm ownership (sole proprietorship)	-0.07	-0.10	-0.10	0.12	-0.05	-0.01	0.04	0.11	-0.14	-0.27	-0.16	1.00

Diagram B1 Distribution of the key variables in Chapter 4 & 6

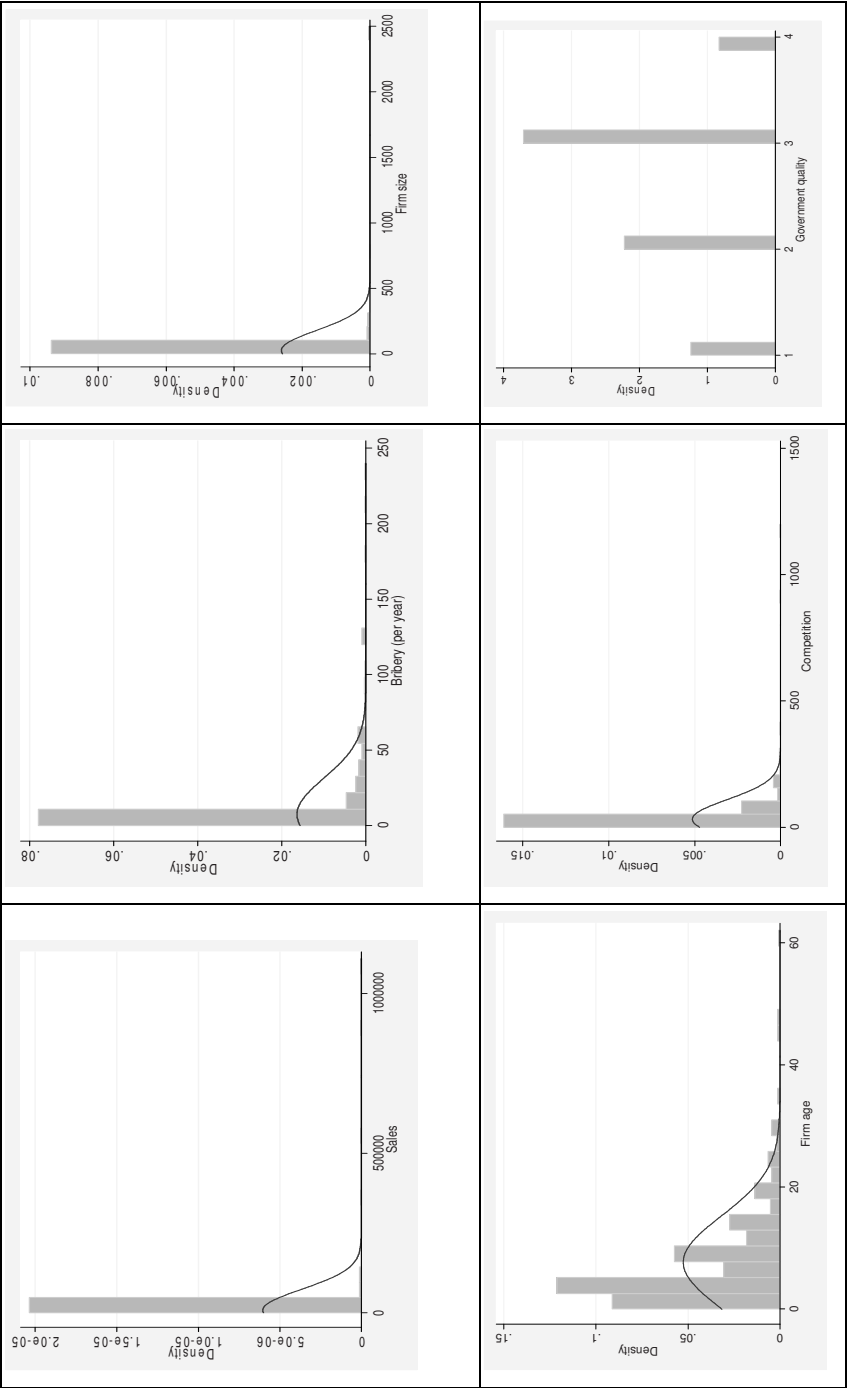
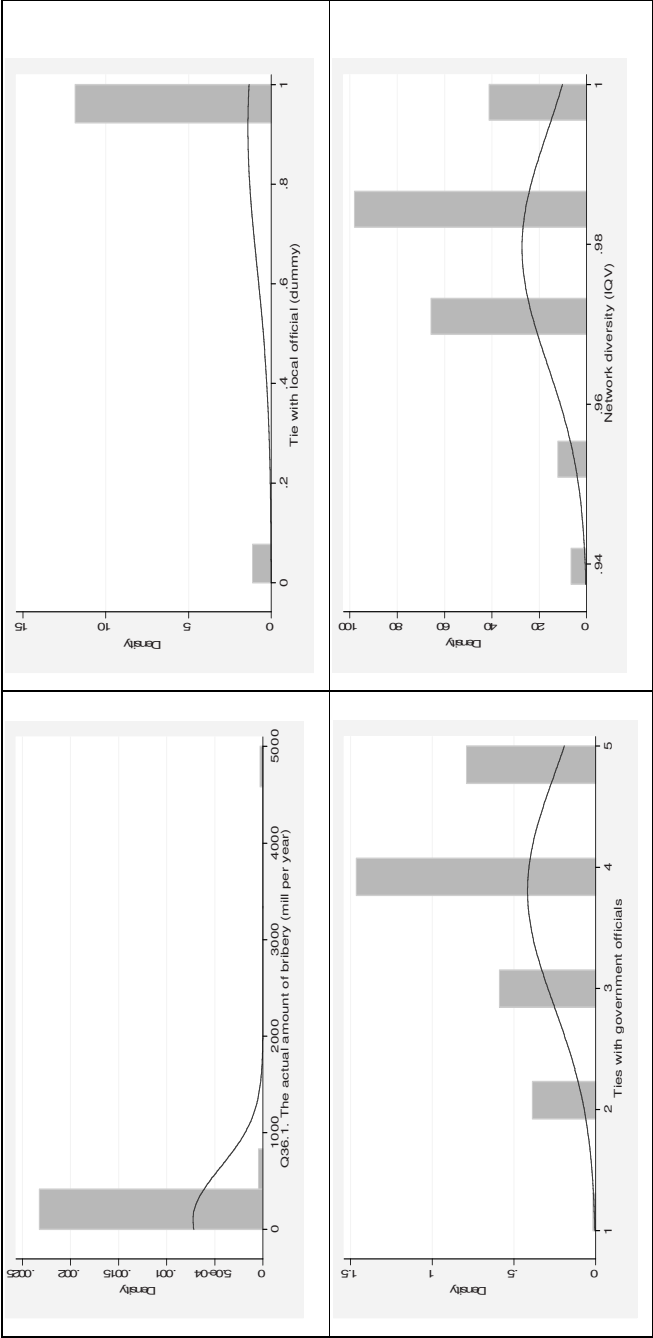


Diagram B2 Distribution of the key variables in Chapter 5



APPENDIX C1

QUESTIONNAIRE (2004)

1. Type of Ownership:

1- Sole proprietorship; 2- Limited company; 3- Joint-stock company; 4- Collective; 5- Family

2. Please indicate main products in your business or industry sector:

No.	Products/Services/Trade	Percent (%) per total revenues
1.		
2.		

3. Firm age: _____ years or the number of years firms have existed: _____

4. Educational level of the managers of the firms: 1 2 3 4 5 6 7 8 9 10 11 12 >12

(1 → 5: Elementary; 6 → 9: Secondary; 10 → 12: Highschool; above 12: University)

5. The number of times participating in management training courses:

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 above

6. Work experience: _____ years or from year _____ .

7. General information:

N°	Items	2004
1	N° of Employees (frequently)	
2	N° of seasonal employees (at the most peak time)	
3	Fixed Assets value (VND Mill)	
4	Current Assets (VND mill)	
5	Tax (VND mill)	
6	Total cost (except tax) (VND mill)	
7	Total Revenue (VND mill)	
8	Bank debts (VND Mill)	
9	Other debts (VND Mill)	

8. In your opinion, the level of competition in the same business or industry sector is:

1- Very low; 2- Low; 3- High; 4- Very High

9. The number of competitors in the same business or industry sectors?: _____ .

10. Please indicate costs due to malfunctioning public services:

	<i>N^o of times</i>	<i>Average hours</i> (hours per times)	<i>Damage (VND)*</i>
1. Electricity cuts			
2. Water supply cuts			
3. Telephone cuts			
4. Traffic			

(*) Please estimate total costs.

11. In your opinion, what is the efficiency of the local government?

1- very low efficiency; 2- low efficiency; 3- high efficiency; 4- very high efficiency.

12. Monthly, how much must your enterprise pay 'to lubricate' its business affairs? _____ 1.000 VND.

APPENDIX C2

QUESTIONNAIRE (2009)

1. Firm age: ____ or ____ years ago.

2. Types of ownership: 1 - State, 2 - Joint-stock company, 3 – Limited company, 4 - Cooperative, 5 - Collective, 6 - Sole proprietorship, 7 - Family, 8 – Others

3. Please list the name of main products or main services:

No	Main product name or services	Industry sector			Percent (%) per total revenues
		Service	Trade	Manufacturing	
1.					
2.					
3.					

4. Educational level of the top manager: 1 2 3 4 5 6 7 8 9 10 11 12 13. College 14. Bachelor 15. Bachelor in economics 16. Master 17. Master in economics

5. Top manager's age__ When was top manager born?__

6. Gender (top manager) : 1 - Male, 0 - Female

7. Are you now a member of: a- Youth union, b-communist party, c- labor union, d- trade union, e- social organization, f- free member.

8. Was you a member of: a- Youth union, b-communist party, c- labor union, d- trade union, e- social organization, f-free member.

9. Do you have a family relative or close friends who works for: a- government agency, b- state-owned enterprises, c- private enterprises.

10. What is the quality of the personal ties of the managers with local authority/government agencies during the last three or five years?

- Ties with local officials: 1- very poor quality, 2- poor quality, 3 – quite good quality, 4- good, 5- very good quality
- Ties with government agencies: 1- very poor quality, 2- poor quality, 3– quite good quality, 4- good, 5- very good quality

11.General information:

N ^o	Items	2004
1	N ^o of Employees (frequently)	
2	N ^o of seasonal employees (at the most peak time)	
3	Fixed Assets value (VND Mill)	
4	Current Assets (VND mill)	
5	Tax (VND mill)	
6	Total cost (except tax) (VND mill)	
7	Total Revenue (VND mill)	

8	Bank debts (VND Mill)	
9	Other debts (VND Mill)	

12. Monthly, how much must your enterprise pay ‘to lubricate’ its business affairs? _____ 1.000 VND.

13. Statement: “Paying an amount of cash to ‘lubricate’ your business affairs is completely forced.....or completely voluntary?”

1- Completely involuntary bribe payments, 2 – involuntary, 3 – just do it as implicitly understood, 4- voluntary, 5 - completely voluntary bribe payments.

14. Statement: "In the last three years, all business licences are difficult to obtain, they cost much time to come and pick up and other costs”:

1– Strongly disagree, 2- disagree, 3- Not either disagree or agree, 4- agree, 5- Strongly agree

Chapter 4

Firms, context, and bribery in a transition economy

4.1 Introduction

During the past decades, the number of corruption studies has mushroomed (Aguilera & Vadera, 2008; Bardhan, 1997). Most of these studies are empirical and cross-country; moreover, many have a macro orientation, primarily because corruption is viewed as a function of the institutional environment. Although helpful, these studies can provide only limited insights into bribery at the level of individual actors or organizations in a country due to the aggregate nature of the (cross) country data. The intent of this research is to explain within-country variation of bribery.

Therefore, this chapter investigates which firms in a transition economy pay a bribe to government officials and which do not. For my explanation, I use the perspective of force. That is, I work from the perspective that firms are embedded in a particular context (external context) and, likewise, that managers are embedded in an organizational context (internal context).

Although all firms face forces to pay bribes in a transition economy, I argue that firms differ in their response to perceived internal and external forces. Perceptions are important because the business literature has shown that private firms form their strategy and cognitive maps according

to perceived information and events (Daniels et al., 2002; Hodgkinson, 1997). This study is a reply to the call for more firm-level corruption research, as advocated in the special topic forum on corruption in the *Academy of Management Review* (2008). The sparse but promising firm-level corruption research, among other things, has focused on strategies firms use to avoid potential harmful effects of corruption as they enter markets (Rodriguez et al., 2005; Uhlenbruck et al., 2006) and findings that bureaucratic interference is greater in firms that are more likely to pay bribes (Clarke & Xu, 2004; Svensson, 2003; Swamy et al., 2001). The current research complements these studies by analyzing how internal and external forces may explain the likelihood of bribery.

The outline of this chapter is as follows. The following section briefly addresses peculiarities of private firms that operate in a transition economy. The next section introduces the overall theoretical logic. I explain how perceived internal and external forces contribute to the likelihood that a firm will pay a bribe. The perspective of perceived force helps formulate two illustrative sets of hypotheses that each explain why some firms, more (less) than others, are more (less) likely to be involved in bribery transactions. The next section tests the hypotheses with data from a business survey of 606 entrepreneurs in Vietnam. The final section provides a discussion and a conclusion to the chapter.

4.2 Transition economies and bribery

In discussing whether and how particular firms in a transition economy are involved in corrupt transactions, it is first necessary to briefly elaborate on the particular circumstances of private firms in a transition economy. In transition economies (see Bruton et al., 2008), an entrepreneur's likelihood of engaging in corruption may be fostered by underdeveloped formal

institutions (Hellman et al., 2003; Radaev, 2004). Entrepreneurs in transition economies face more uncertainty, risks, and generic business difficulties than those in advanced economies due to the void of formal institutions (Bruton & Ahlstrom, 2003; Puffer et al., 2010). An institutionally weak transition economy—with, for example, poorly trained bureaucratic staff—often results in an unstable business environment and creates an institutional void sometimes filled by informal environments such as (personal) networks (Ahlstrom & Bruton, 2006; McCarthy & Puffer, 2008). The void of formal institutions displays the absence of enforcement mechanisms. As a result, informal institutions can complement formal institutions (e.g., trust or networks enables firms to lower transaction costs).

The underdeveloped formal institutional framework results in forces that force firms to adapt to external conditions. For example, because of the high costs associated with regulatory compliance and high entry costs in the formal sector, together with a corrupt system of compliance control, firms may choose to operate in the informal sector. The informal sector refers to firms operating without being officially registered. It is a logical response of micro and small enterprises to a legal system that puts them at a disadvantage vis-à-vis large firms and state-owned enterprises.

From a country perspective, the effect of an underdeveloped institutional environment on firm deviant behavior (bribery) is important (Puffer et al., 2010) because bribery can promulgate the unproductive use of financial resources (Rajan & Zingales, 1998). Although bribery can be regarded as an investment entrepreneurs must make to operate successfully in an institutionally weak transition economy (see also De Jong et al., 2010; Peng & Heath, 1996), it can be argued that on a macro scale, bribery has opportunity costs because bribery payments are not used for

investments or innovation. Particularly in transition economies, such opportunity costs may hamper economic growth.

4.3 Theoretical background and hypotheses

Economic agents are affected by their environment; for example, the environment forces them to meet particular requirements. In general terms, force is the perceived force that comes into play when targets are not met—that is, when company or managerial goals do not align with current circumstances. In a transition economy, the perceived force determines a company's decision to engage in bribery because bribery is an instrument that can be used to release perceived forces. My point of departure is that context characteristics determine the decisions economic agents make. In what follows, I use this point of departure to study two levels of context: the firm embedded in a firm context and the entrepreneur embedded in an organizational context. I expect that both levels of contexts matter in a firm or manager's likelihood of engaging in bribery.

External forces

During the past decades, different fields of research have studied the corruption phenomenon, offering a wealth of explanations for the existence of bribery activities. Macro-level (empirical) studies suggest that the likelihood of bribes paid by firms depend on such things as legal attributes, cultural characteristics, the level of human capital, and the institutional characteristics of a country (Chen et al., 2008; Mocan, 2008; Svensson, 2003). These determinants are valuable for explaining macro-level determinants of bribery across countries but offer little explanatory power for micro-level determinants of bribery within a country.

The available corruption research applies different theoretical foundations with which to explain bribery activities. From an economic perspective, firms' bribe-paying behavior can be considered a (rational) market response aimed at adjusting government failure or weak institutional structures that hamper entrepreneurship (Aidt, 2003; Méon & Sekkat, 2005). According to economics, bribery is primarily driven by efficiency considerations, which explains that firms are willing to pay bribes to speed up bureaucratic processes (Huntington, 1968; Leff, 1964; Lui, 1985). Strategic management studies emphasize that the conditions or outside forces to firms, such as the scarcity of resources, act as fundamental drivers for organizational performance. A lack of resources explains why firms use corruption to adapt an organization to situations of uncertainty and, in so doing, aim to secure firm survival (Baucus & Near, 1991; Hannan & Freeman, 1989; McKendall & Wagner, 1997).

In a similar vein, social scientists apply anomie theory in explaining the influence of environment on a firms' ethical behavior and firms' decision-making processes (Martin et al., 2007; Merton, 1964, 1968). Anomie theory is one of the leading sociological theoretical frameworks that help researchers understand deviant behavior, such as bribery, due to peculiarities in a context (Merton, 1968; Zahra et al., 2005). According to this theory, it can be argued that firm-level bribery primarily derives from the context in which it operates, because firms use deviant alternatives when legal means to achieve goals fail. Anomie theory proposes that people who are unable to achieve their aspiration by conventional means experience strain and may seek to relieve this strain by using deviant means such as bribery.

In line with anomie theory, institutional theory also emphasizes the impact of contextual conditions on entrepreneurial behavior (Welter & Smallbone, 2011), because entrepreneurial behavior is placed in the context in which it occurs. The external environment in general and the

institutional context in particular explain entrepreneurial decisions. Behavior can be viewed as a reaction to institutional forces (Peng & Heath, 1996). For example, tax evasion may become necessary for firms to survive in an underdeveloped institutional environment in which legal arbitrariness occurs (e.g., arbitrary variation of effective tax rates across similarly situated taxpayers).

Thus, following this line of thinking, I argue that forces from (1) the perceived level of competition and (2) the perceived quality of the local government may explain bribery incidence. First, when faced with perceived forces of competition, firms are more likely to consider the use of illegal means (bribery) to obtain their targets (Baucus & Near, 1991; Martin et al., 2007). Martin et al. (2007) suggest that the greater the competition firms perceive e.g. for such things as scarce resources, the more likely firms will pay bribes. This is because entrepreneurs are more likely to behave in a deviant manner when they interpret the competitive environment to be less munificent (Staw & Sz wajkowski, 1975). Second, the quality of the local government is understood as an indicator that displays the efficiency of government (La Porta et al., 1999). Treisman (2000) defines the quality of the government as the provision of public goods and services that the public demands at minimum costs in taxation and regulatory burden. According to theories of institutional development, the quality of the (local) government is low when the (perceived) quality of regulation and the security of property rights is low (La Porta et al., 1999). The quality of the government (or bureaucracy) is thus associated with the government intervention power. The greater the intervention power regarding intensive regulations, discrete decision-making power, or arbitrariness, the lower the efficiency of the government and the greater the likelihood of government delays or other public administration distortions for firms (Mauro, 1995; Shleifer & Vishny, 1993). The rationale is that in an existing regulatory system,

public officials have discrete decision-making power to execute laws and enforce rules, so that their decisions on licenses, permissions, and taxes create force that directly affects firms' behavior (Kuncoro, 2004; Svensson, 2003). Thus, public officials with high levels of discretionary power may use bureaucratic delays to demand for bribes (Shleifer & Vishny, 1993). In particular, if a firm perceives that regulations are ambiguous and officials are able to manipulate the interpretation of regulations, it may be more likely to pay a bribe (Chen et al., 2008). In what follows, I specify the hypotheses for competition and quality of the government.

The level of (perceived) competition is the first variable that explains how forces in the environment of an organization in a transition economy may foster the likelihood of bribery. Organizations are embedded in business systems to which they must adapt to survive (Pfeffer & Salancik, 1978; Redding, 2004). Many variables shape a firm's response to its institutional environment. It is generally accepted that the main goal is to align institutional structures with the firm's attempt to gain competitive advantages (Witt & Lewin, 2007). Thus, environmental characteristics can create (perceived) forces and a need for bribery. The level of competition is among the most important forces. Industrial organization literature shows that profits decrease as the number of competitors challenging the survival opportunities of the company increases.

I hypothesize a positive link between bribery and perceived competition, suggesting that when the force of perceived competition increases, firms are more likely to engage in bribery as an attempt to relieve perceived competitive forces (Baucus & Near, 1991). If the agents perceive the environment as highly competitive, they experience forces due to, for example, difficulties in acquiring firm-specific resources that will help them meet competition and obtain desired levels of firm performance. This is why these firms are more likely to engage in bribery (Baum &

Oliver, 1996; Vaughan, 1983). In a transition economy, firms operate in an underdeveloped institutional structure. Bribing public officials for special treatments or other benefits may present an opportunity for a firm to undermine its rivals, maintain its monopoly position, or prevent new firms from entering the market (Martin et al., 2007). Therefore, I hypothesize the following:

H₁. In a transition economy, there is a positive relationship between the perceived level of competition and the likelihood of paying bribes.

The perceived quality of the local government is the second explanation for how external forces in a transition economy may determine the likelihood of bribery (Brunetti & Weder, 2003; Gurgur & Shah, 2005). Again, as with competition, it is the perceptions of quality that drive firms' decision-making behavior. As mentioned previously, the (perceived) quality of government can be defined as the extent to which the government provides public goods and services to citizens at minimum costs in taxation and regulatory burden (Treisman, 2002) and the extent to which the government treats all individual firms impartially (Charron & Lapuente, 2011). In an ideal world, the level and quality of services of a government is the same for all firms in a region or nation–state. However, this is often not the case in a transition economy because of the inherent differences of national or local officials in replying to firm requests for such things as information about rules and regulations. Thus, it is the arbitrariness of government decisions, the weak accountability of government officials, and the disputable implementation and monitoring of regulation that matters for the day-to-day, successful operation of a firm in a transition economy. Therefore, I argue that the (perceived) quality of the local government is a potentially important explanation for firm-level bribery. To put it differently, firms will have

little or no inclination to pay a bribe if the quality of the local government is high—for example, when a local government makes consistent decisions that are relevant for all firms. In contrast, a low perceived quality of government services may impose substantial burdens on firms and provide a source of external force (Aidis & Adachi, 2007; Aidis et al., 2008; McMillan & Woodruff, 2002). Therefore, I hypothesize the following:

H₂. In a transition economy, there is a negative relationship between the perceived quality of the local government and the likelihood of paying bribes.

Internal Forces

Next, there are internal forces that explain why some managers in a transition economy engage more than others in bribery. Baucus's (1994) corporate illegality theory suggests that internal forces that arise from performance, structure, and age are among the most important in explaining why managers engage in illegal behavior. As mentioned previously, the more forces a manager faces, the greater the likelihood that he or she engages in bribery. The rationale is that when force increases, a manager's need to react in particular ways increases as well. In line with Baucus (1994), I elaborate why (1) structure and performance and (2) age matter as sources of internal force. Structure and performance are two dimensions that relate to the size of a firm. Note that previous research has indicated that although size and age tend to correlate in advanced economies, this is not always the case in transition economies reference needed. Many firms in transition economies, for example, may deliberately decide to stay small because of the strategic advantages (and a lower likelihood to pay bribes).

First, from an organizational perspective, it can be argued that particular organizational structures will result in bribery (Lambsdorff, 1999; Luo & Han, 2009; Tanzi, 1998; Treisman, 2000; Zahra et al., 2005). Delmas & Toffel (2008) argue that the structure of a firm is a key determinant of the receptivity of managers to forces and thus affects a manager's decision of how to respond to these (perceived) forces. A firm's organizational structure (e.g., administrative rules) may force managers to comply with social sanctions (Lange, 2008). A more complex structure will result in more forces (e.g., more administrative rules). Furthermore, firm structure may also matter for the incidence of deviant behavior in terms of opportunities for managers to break rules on behalf of the firm (MacLean, 2001). That is, a more complex structure may align with a reduction in information flows that in turn may facilitate the ease with which managers can engage in bribery (Finney & Lesieur, 1982).

In line with Baucus's corporate illegality theory, anomie theory also predicts that managers who perform poorly are more likely to engage in bribery than those who perform well. Managers may have a need to improve short-term performance, which may push them to conceal information on actual performance, make mistakes on products, or engage in bribery. Thus, in anomic internal organizational contexts, the force to achieve organizational goals can drive managers to engage in bribery (Martin et al., 2007).⁵

Second, internal forces may result from the stage of the company in the overall firm life cycle (Naughton & Cornwall, 2006). In the early stages of their existence, firms experience more forces for survival than established firms (Stinchcombe, 1965). For example, in the first years of

⁵ Furthermore, an organization's performance is also a trigger for government officials to ask for bribes. This is an outside force. As Svensson (2003) explains, government officials use their perceptions of an organization's performance to determine whether it is able to pay a bribe. Organizational performance is one of the ingredients in the bargaining process between managers and government officials.

their existence, managers lack managerial skills, business experience, relationships with stakeholders, and market legitimacy needed for the company to survive (Das & He, 2006; Thornhill & Amit, 2003). However, I argue that these internal forces fade away as the company becomes older; for example, the force to exit a market due to bankruptcy or a lack of competitive resources declines with age (Singh & Lumsden, 1990). In what follows, I present the hypotheses for structure and performance (size) and for age.

With regard to organizational structure and performance, in line with firm-level studies of bribery, I use firm size as an indicator for structure and performance. In Svensson's (2003) bargaining theory, for example, the point of departure is that larger firms are likely to earn higher revenues (and for that reason, government officials use firm size as a proxy for their bribery demands). Following the perspectives of force, I therefore argue that in a transition economy, small firms are less likely to pay bribes than large firms. Small firms have little or no issue with internal forces due to organizational incentives or other structural attributes (Baucus & Near, 1991). An increase in size will increase the degree of complexity and create problems of communication, coordination, and control (Vaughan, 1983). In addition, in small firms, the risk of detecting bribery activities is high. Managers that operate in a large and thus more complex organization have more opportunities to behave illegally without fear of being caught compared with those who work in a small firm. In a large firm, managers can better hide and can make better (mis)use of decentralized decision-making processes (Vaughan, 1983). The act of being caught has a greater impact on small firms than on larger firms because of they may lack financial resources to fund legal procedures (Yeager, 1986). Finally, small firms are less "visible" to public officials than larger firms, and thus, they can more easily hide from state

officials (Dabla-Norris et al., 2008; McKenzie & Seynabou Sakho, 2010; Svensson, 2003).

Taking these factors into account, I hypothesize that small firms are less likely to pay bribes or, put differently, that large firms are more likely to pay a bribe.

H₃. In a transition economy, firm size has a positive relationship with the likelihood of paying a bribe.

From the perspective of force, it stands to reason that in a transition economy, young firms are more likely to pay bribes than older firms (Fjeldstad et al., 2009; Liedholm & Mead, 1999). More in particular, I suggest that the relationship between firm age and the likelihood of bribery is nonmonotonic and U-shaped, for several reasons. First, the forces to gain legitimacy and to survive are the highest for young firms. Various studies have shown that the breakdown risks due to bankruptcy or a lack of financial performance is the highest for young firms. It is well-known that startup companies face many more constraints and thus greater force than those that have survived the liabilities of newness. Difficulty in accessing capital, registration, and licenses and developing competitive products or services can all result in forces that young firms in particular experience. As firms mature, the forces that so prominently appear in the first years of their existence fade away, reducing the need to bribe government officials. However, over time, firms will move toward a maturity stage in its life cycle reflected by obsolescence, which is difficult to counter due to inertia, outdated management skills, and other organizational features (Bruderl & Schussler, 1990; Sørensen & Toby, 2000). Firms may experience renewed forces to survive and improve market performance, thereby increasing their likelihood to bribe, as government

officials may offer protection from the risks of maturity and competitive and market circumstances.⁶ The preceding arguments offer a support for the following hypothesis:

H₄. In a transition economy, there is a nonmonotonic U-shaped relationship between firm age and the likelihood of paying bribes.

4.4 Research Methods

4.4.1 Dependent and independent variables

The likelihood of bribery was measured with a dummy variable that takes the value of 1 if the firm reports having a positive amount of money to government officials to conduct its business, and 0 otherwise. The particular question in the questionnaire was as follows: “Monthly, how much must your enterprise pay ‘to lubricate’ its business affairs?” The question was asked in Vietnamese. We used the usual forward and backward translation process to obtain the English version. The expression *bôi trơn* in the original Vietnamese question literally means “to lubricate”; it is a colloquial synonym for money paid as bribes to government offices or administrative regulators. The closest English equivalent is “to grease someone’s palm”. The survey explicitly defined “to lubricate” as money paid to government offices or administrative regulators. The measure does not include other forms of bribery such as gifts that may have monetary value as well. It is similar to the ones TI and the World Bank use.

⁶ In addition, and complementary to the internal force arguments, (strategic) management scholars have argued that young firms might be more vulnerable to the demands of bribery because they have fewer resources and less political influence than older and thus established firms (Clarke & Xu, 2004; Collins et al., 2009). Olson (2000) also suggests that age matters in the likelihood of bribery because young firms are considered a short-term partner for government officials: Officials may behave like “roving bandits” toward them.

As explained previously, I measure the level of competition on the basis of the relevant number of competitors (rivals) in the same business or industry sectors as perceived by the entrepreneurs. Previous research has considered the perceived number of competitors an appropriate indicator (Barnett, 1997; McNamara et al., 2003). Self-reports of competition are a more comparative advantage method than traditional proxy measures and objective indicators such as concentration ratios (e.g., the Herfindahl index) in reflecting a firm's beliefs (Cool & Dierickx, 1993). Thus, I work from the idea that entrepreneurs form their competitive maps (and other ideas) according to perceived information and events (Daniels et al., 1995; Hodgkinson, 1997) and measure the quality of government by the respondent's answer to the following four-point Likert-scale statement: "In your opinion, what is the efficiency of the local government?" (1 = "very low efficiency" to 4 = "very high efficiency")⁷. The measurement of the quality of the government in terms of efficiency is in line with prior studies (La Porta et al., 1999; Rauch, 1995). Firm size was measured by the number of employees who in 2004 worked frequently for the company (log).⁸ The age of the company was calculated by subtracting the year the firm was founded from the current year (Goll & Rasheed, 2005).

⁷ Studies in industrial economics and organizational ecology have presented other measures aimed to capture the subjective assessment of this concept, such as items asking for an estimate of market share loss after competitors dropped their price with 10 per cent (Boone et al., 2004; Zhou & van Witteloostuijn, 2010). My measure is a first proxy for competition intensity. Due to data availability, I could not apply alternative measures such as the ones presented in industrial organization or organizational ecology. This is an acknowledged limitation of this study.

⁸ As elsewhere, the number of employees in Vietnamese organizations varied during the year. In general, these entrepreneurs do not maintain employee records with, for example, employee contracts that would allow respondents to precisely determine start and end dates for all their employees. However, given the relatively small scale of their companies, the respondents knew the number of employees with fixed appointments as well as the number of people they employed during peaks. The former category consisted

4.4.2 Control variables

Three sets of controls were entered when the hypothesized relationships were tested. The first set involved the entrepreneur's human capital (Wright et al., 2007), which can be increased through formal and informal education. I defined the level of formal education as having an official degree as a result of full-time or long-term training, and it measured a person's knowledge or competence base. Formal education was measured by the highest level of education the manager had obtained (Luo & Han, 2009). Macro-level studies have found that countries with higher levels of education are positively correlated with lower figures of corruption (Treisman, 2000). This correlation, in turn, has been interpreted as proof that education decreases corruption, which is supported by the argument that a more educated society would be expected to have lower tolerance for bribes. However, it is argued that although individual education and ethical awareness is positively associated, well-educated managers are likely to engage in bribery. This line of reasoning maintains that well-educated managers would see and capture bribery opportunities better than less educated managers because of their superior awareness levels, cognitive skills, and decision-making capabilities (Marvel & Lumpkin, 2007). Well-educated managers may rationalize or neutralize their illegal actions without any regrets or considering aspects of ethical problem in a transition economy (Anand et al., 2005). The second entrepreneurial characteristic aligns with the previous one: Informal education was measured by the number of times a respondent had participated in management training courses (Aidis & van

of persons with an oral agreement regarding working hours and salaries (written employee contracts are rare in Vietnam) and which people worked for the company throughout the year. I used this information to measure the size of the company. Respondents also indicated the number of seasonal employees. I decided not to use this information because the length of peak seasons was not known and typically varies for companies and industries.

Praag, 2007). Thus, the level of informal training was determined by participation in management courses, including short-term ones (postgraduate education).

The second set of control variables involves firm characteristics—that is, the firm's type of ownership, costs due to malfunctioning public services, and the debt position of the firm. The type of ownership may possibly determine the incidence of bribery. For instance, with dispersed owners, managers may act opportunistically and follow their own interest at the expense of the firm. Controlling founder-managers on the other hand, may expropriate minority shareholders. Or, family owners may maximize family interests at the expense of other shareholders. Because of these alternative incentives and opportunities, my model accounts for ownership type. The type of ownership in Vietnam is determined by the Central Institute for Economic Management. The rights and obligations per ownership type are specified in the Enterprise Law (Central Institute for Economic Management, 2005). The Enterprise Law specifies five main ownership types: sole proprietorship, limited liability company, shareholding company, family business, and collectives. Collectives are not part of the sample and therefore are not included. I constructed three dummies; that is, ownership dummy 1 is 1 if the firm was a sole proprietorship and 0 otherwise, ownership dummy 2 is 1 if the firm was a limited liability company and 0 otherwise, and ownership dummy 3 is 1 if the firm was a shareholding or joint-stock company and 0 otherwise. The family firm type of ownership is the benchmark case (Gundry & Welsch, 2001). Next, I controlled for the estimated costs that firms must pay due to malfunctioning public services—in this case, electricity cuts. I measured public service costs using a dummy variable that equals 1 for firms that faced electricity cuts and 0 otherwise. It is argued that the greater the firm's dependency on public services, the more likely firms are to pay a bribe due to the disadvantage of bargaining position (Svensson, 2003). I also controlled for the debt position of

the firm. This study measures firm debt with a dummy variable that equals 1 if the firm has a loan from a state bank (and 0 otherwise). Firms with debts from state banks are likely to suffer from (external) force such as interest rate and cash flow problems (Clarke & Xu, 2004) because they depend on using public services and are under public control.

I also control for the industry context in which the company operates. For example, challenging conditions in the service sector—such as short investment horizons and decreasing financial returns due to environmental hostility or heterogeneity—may explain why firms in this industry tend to bribe government officials more often than firms in other industries such as the trade sector or manufacturing sector. The respondents operate in three main industries: services, trading, and manufacturing. I constructed two dummy variables to account for industry differences: one for services (that equals 1 if the firm operates in the service sector and 0 otherwise) and one for trading (that equals 1 if the firm operates in the trading sector and 0 otherwise). Manufacturing was considered the base case in the model and was thus not included.

4.4.3 Estimation procedures

I used a (logit) binary choice model to empirically test the hypotheses (Chen et al., 2008) while controlling for individual, firm, and industry characteristics. A firm has a single choice between paying and not paying a bribe to public officials. From the perspective of expected utility maximization (Svensson, 2003), a firm will pay the bribe if the expected utility from this action is greater than the expected utility of not paying it. Because the expected utility of paying the bribe is unobservable, I model the difference between the expected utility of paying bribe and not paying the bribe as follows:

$$y^* = \beta'x_i + \varepsilon, \quad (1)$$

where y^* is latent unobservable difference in expected utilities. The x_i vector represents the entrepreneurial characteristics, contextual conditions, and control variables affecting the likelihood of bribery, and the β' vector is the corresponding parameters. ε is assumed to have a logistic (logit model) distribution.

I do not observe the latent variable y^* , but I do observe whether a bribe has been paid out. Thus, the y binary variable can be defined as follows:

$$y = 1 \text{ if } y^* > 0, \text{ and} \quad (2)$$

$$y = 0 \text{ otherwise.} \quad (3)$$

It follows that

$$\text{Prob}(y_i = 1 | x_i) = \text{Prob}(\varepsilon + \beta' x_i) = F(\beta' x_i), \quad (4)$$

where F is the cumulative distribution function of ε (Greene, 2003). I estimate the logit form because I assume a bell-shaped distribution for ε that has thicker tails than a standard normal. Maximum likelihood procedure is used to estimate the parameters of the binary choice model. The logit distribution is given by the following:

$$\text{Prob}(y_i = 1) = \frac{e^{\beta' x_i}}{1 + e^{\beta' x_i}} = \Lambda(\beta' x_i) \quad (5).$$

I estimate the logit form because I assume a bell-shaped distribution for ε that has thicker tails than a standard normal distribution. Maximum likelihood procedure is used to estimate the parameters of the binary choice model. To specify the likelihood equation, I define p as the probability of observing whatever value of y was observed for a given observation:

$$p_i = \begin{cases} \text{Pr}(y_i = 1 | x_i) & \text{if } y_i = 1 \\ 1 - \text{Pr}(y_i = 1 | x_i) & \text{if } y_i = 0 \end{cases} \quad (6)$$

where $\Pr(y_i=1 | x_i)$ is defined by Equation 4. If the observations are independent, the likelihood equation is as follows:

$$L(\beta | y, X) = \prod_{i=1}^N p_i \quad (7)$$

It is impossible to compute the variance of y^* from the observed data or the variance of y^* is unknown, so the meaning of the partial change for each β in y^* is not clear (Long, 1997, p.70). To interpret the coefficients of the explanatory variables, I compute the β standardized coefficients. Assuming that σ_{y^*} is the unconditional standard deviation of y_i^* , the y_i^* standardized coefficients can be calculated with respect to x_i , which indicates that for a unit increase in x_i , y_i^* is expected to increase by β_p^{SY*} standard deviations, holding all other variables constant. Assuming that σ_x is the unconditional standard deviation of x_i , the fully standardized coefficient can also be calculated for x_i , which indicates that for a standard deviation increase in x_i , y_i^* is expected to increase (or decrease) by β_p^{FS} standard deviations, holding all other variables constant.

To provide a better understanding of the partial change in the probability of bribery, I compute marginal effects for the logit model following Long (1997, p.74). The marginal effects depend on the magnitude of the β s for all variables and the levels of all x 's- values of other variables, $x\beta$, because f is computed at $x\beta$:

$$\frac{\partial \Pr(y = 1 | \bar{x})}{\partial x_k} = f(\bar{x} \beta) \beta_i \quad (8)$$

4.5 Empirical Results

Table 4.1 provides means, standard deviations, and correlations. Of the 352 observations, 76% (268) reported that they did not pay bribes. According to our data, the yearly average amount of bribes paid by firms reporting positive bribes was VND 30.05 million (US\$1,905.5). If we include firms reporting zero bribe payments, the average payment is VND 7.17 million (US\$454.66). In our sample, 52% of the companies operate in the trade sector, and 15% in the service sector. Of the companies, 54% are sole proprietorship, 11% limited liability companies and 2% joint stock firms. About 70% of the companies in our sample have fewer than 10 employees, and 26% have 11 to 50 employees. On average, the age of the firms is 7.44 years. The number of competitors is, on average, 35.93 competitors. Of the respondents, 58.52% reported that the quality of the government in terms of efficiency is high and very high efficiency.

Table 4.2 summarizes results from the hierarchical logit regression analyses. In preparation for the regression analyses, I performed the customary tests to obtain reliable estimates. These tests reported satisfactory results; that is, there is no heteroscedasticity or multicollinearity. Among other things, I tested for possible bias caused by collinearity among variables by calculating the variance inflation factor (VIF) for each of the regression coefficients. Calculations of VIF ranged from a low of 1.09 to a high of 1.49, well below the cutoff figure Neter et al. (1985) recommend and indicating the absence of multicollinearity. To verify whether the logit model is suitable, I used the Hosmer-Lemeshow test for goodness-of-fit. For the model, the Hosmer-Lemeshow value is insignificant (p -value = .35), and therefore, I conclude that the model fits the data well.

In addition, before running the logit model, I investigated whether being corrupt is driven by

a different process from the level of corruption given that entrepreneurs are corrupt. To this end, I used a Tobit-2 procedure that includes two submodels: One is the probit (or logit) model and the other is a regular least squares that serves to explain the amount of bribery. The idea is that if I estimate the second submodel (ordinary least squares) and ignore the link to the first submodel (probit/logit), the estimators may not be consistent (Cameron & Trivedi, 2005). The results from the Tobit-2 model, however, show that no connection between the two stages exist, as exemplified by an insignificant value for the Mills ratio ($B = -51.61$; and nonsignificant with $p = .58$). Thus, a sample selection issue is of less concern, and I conclude that a logit model is an appropriate choice and continue with the one-stage approach.

Table 4.1 Correlations, Means and Standard Deviations (SD)

	Mean	SD	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1.Bribery	0.24	0.43	1.00													
2.Formal education	10.58	2.69	0.10*	1.00												
3.Informal education	1.08	2.77	0.21**	0.08	1.00											
4.Sole proprietorship	0.54	0.50	0.09	0.07	0.07	1.00										
5.Limited liability	0.11	0.32	0.09*	0.16**	0.06	-0.39**	1.00									
6.Joint-stock	0.02	0.15	0.14*	0.13**	0.05**	-0.17**	-0.05	1.00								
7.Electricity cuts	0.13	0.34	0.05	-0.10	0.03	0.14**	-0.01	0.05	1.00							
8.State Bank debt	0.38	0.48	0.16*	-0.08	0.05	0.10*	0.02	0.04**	-0.03	1.00						
9.Trade	0.52	0.50	-0.03	0.21**	0.03	0.04	0.02	-0.01	-0.08	0.00	1.00					
10.Services	0.15	0.36	0.16**	0.03	0.07	-0.02	0.10	0.10*	0.05	-0.11	-0.44**	1.00				
11.Firm size (log)	2.01	1.05	0.24**	0.12**	0.29**	0.09	0.20**	0.24**	0.09*	0.21**	-0.22**	0.07	1.00			
12.Firm age	0.74	0.71	-0.08	-0.27**	0.06	-0.14*	-0.19**	-0.04	0.03	0.02	-0.19**	-0.14**	0.03	1.00		
13.Competition	35.93	92.45	0.14*	-0.01	-0.02	0.03	-0.03	-0.02	-0.04	0.02	-0.11**	-0.02	0.18**	0.04	1.00	
14.Government quality	2.53	0.87	-0.14*	-0.06	0.02	0.04	0.06	-0.09	-0.05	0.03	0.09	0.04	-0.04	-0.11**	-0.16**	1.00

* $p < 0.05$; ** $p < 0.01$, two-tailed test.

Table 4.2 The impact of firm characteristics, context on bribery incidence

control variables	bribery	bribery	bribery	bribery	β_p^{SY*}	β_p^{FS}	M.E.
<i>characteristics-entrepreneur</i>							
formal education	0.052 (0.055)	0.034 (0.056)	0.029 (0.056)	-0.008 (0.058)	-0.004	-0.010	-0.001
informal education	0.124 *** (0.044)	0.105 ** (0.048)	0.127 *** (0.045)	0.111 ** (0.044)	0.052	0.143	0.017
<i>characteristics-firm</i>							
firm ownership: sole proprietorship	0.814 ** (0.361)	0.628 * (0.376)	0.845 ** (0.373)	0.581 (0.396)	0.271	0.135	0.090
firm ownership: limited liability	1.043 ** (0.479)	0.693 (0.547)	1.162 ** (0.489)	0.707 (0.549)	0.329	0.105	0.129
firm ownership: joint-stock	1.953 ** (0.879)	1.422 * (0.986)	1.821 ** (0.792)	1.266 (0.862)	0.589	0.088	0.264
public service costs: electricity cuts	0.243 (0.347)	0.218 (0.350)	0.223 (0.361)	0.155 (0.356)	0.072	0.025	0.025
state bank debt	0.816 *** (0.279)	0.731 ** (0.285)	0.831 *** (0.286)	0.747 ** (0.295)	0.348	0.169	0.124
<i>characteristics-industry</i>							
trade	0.188 (0.329)	0.378 (0.364)	0.449 (0.357)	0.678 * (0.405)	0.316	0.158	0.106
services	1.078 *** (0.406)	1.159 *** (0.436)	1.327 *** (0.419)	1.419 ** (0.453)	0.660	0.235	0.284

main variables	bribery	bribery	bribery	bribery	β_P^{SY*}	β_P^{FS}	M.E.
<i>internal forces</i>							
firm size (log)		0.303 *		0.259	0.120	0.126	0.041
		(0.173)		(0.168)			
firm age		-0.099		-0.936 *	-0.436	-0.311	-0.147
		(0.232)		(0.489)			
firm age squared				0.231 **	0.108	0.268	0.036
				(0.114)			
<i>external forces</i>							
competition			0.004 **	0.004 **	0.002	0.172	0.001
			(0.001)	(0.001)			
government quality			-0.424 ***	-0.486 ***	-0.226	-0.197	-0.076
			(0.160)	(0.168)			
<i>constant</i>	-3.224 ***	-3.478 ***	-2.302 ****	-1.719 *			
	(0.631)	(0.781)	(0.765)	(0.958)			
<i>fitness indices</i>							
log pseudo likelihood	-170.852	-168.85	-163.386	-160.408			
wald chi ²	38.220	36.340	53.710	54.280			
prob > chi ²	0.000	0.000	0.000	0.000			
pseudo R ²	0.117	0.127	0.155	0.171			
observations	352	352	352	352			

robust standard errors in parentheses; *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$; M.E = marginal effects

β_P^{SY*} = y-standardized coefficient;

β_P^{FS} = fully standardized coefficient

The various fit parameters show that the model increasingly fits the data better. The R-square index improves from 11.7% in Model 1 to 17.1% in Model 4. The data convincingly support H₁ and H₂, which consider the (perceived) external force. For H₁, the parameter estimate of perceived competition is positive and significant ($\beta = .004$; $p < .05$), indicating that a greater number of perceived competitors make firms in a transition economy more susceptible to use bribery. For H₂, which predicts that low quality of the local government will increase the need to pay bribes, the parameter estimate for government quality is negative and significant ($\beta = -.486$; $p < .01$). H₃ and H₄ consider the (perceived) internal forces. Model 4 shows that firm size indeed is positively related with a firm's likelihood to pay bribes but is not significant ($\beta = .259$; n.s.). Thus, the data do not support H₃. Model 4 offers significant support for the expected U-shaped relationship between firm age and the likelihood of bribery formulated in H₄. The parameter estimate for the main term is negative and significant ($\beta = -.936$; $p < .10$) and for the squared term is positive and significant ($\beta = .231$; $p < .05$). In particular, with the mean value of firm age at .74 years in the sample and the estimated parameter coefficients for firm age and firm age squared, the minimum inflexion point for firm age is 2.03 years. Taken together, these data provide partial evidence that internal forces contribute to the likelihood of bribery.

With regard to the control variables, Table 4.2 shows that formal education is negatively associated with bribery, though it is not significant and therefore has no explanatory power for the main variable of interest ($\beta = -.008$; n.s.). Informal education, however, is positively and significantly associated with bribe incidence ($\beta = .111$; $p < 0.05$). To some extent, this conflicts with mainstream thinking about education, norms, and corruption. The content of business courses may offer an explanation for the significant effect. It is argued that business education may cause a decline in moral development because these programs typically focus on learning

competitive strategies that stress the importance of free-riding, defection, and selfishness (Ghoshal, 2005). In addition, management courses are attended to initiate and develop personal networks and, as such, enable entrepreneurs to learn about prevailing norms and practices of bribery (Brass et al., 1998). Table 4.2 shows that a firm's likelihood to bribe is not significantly influenced by the type of ownership (Luo & Han, 2009). All forms of ownership are not significantly related to bribery incidence (single proprietorship companies: $\beta = .581$; joint-stock companies: $\beta = 1.266$; limited liability companies: $\beta = .707$) and do not pay significantly higher or lower bribes than family firms (the benchmark case). In addition, the costs of public service interruptions are not significantly related to bribery incidence ($\beta = .155$; n.s.). It suggests that in Vietnam, uncertainty of electricity cuts may harm a firm's business operation but does not result in forces that drive firms to bribe government officials. The results for a firm's debt position at a state bank are unequivocal: Debt position is an important variable that explains the likelihood of bribery and strongly aligns with the core ideas of internal forces of firms ($\beta = .747$; $p < .05$). Finally, Table 4.2 shows that the sector in which the firm operates determines a firm's likelihood of bribery. More in particular, the results show that firms in the service sector ($\beta = 1.419$, $p < .01$) and in the trade sector ($\beta = .678$, $p < .10$) are significantly more likely to pay bribes than those in the manufacturing sector (the benchmark case).

I performed four additional tests of robustness. First, I replaced the missing value for a particular question with an estimated value of that question. By doing so, I was able to include all 594 observations, compare the regression models, and determine whether a sample bias exists. The regression results were the same for the dataset in the main text. Second, although all the VIF values are well below the threshold value, in an additional test, I mean-centered the variables to minimize the threat of multicollinearity. This did not affect the results. Third, I

reestimated all models while including interaction terms between some firm and some context characteristics. In particular, it may be the case that micro-firms are more likely to pay bribes when they operate in a highly competitive environment or are confronted with a very low quality of government. Hence, the rationale to perform these robustness tests is to examine whether the effects of context characteristics influence the strength or direction of the effects of firm characteristics on the likelihood of paying a bribe. I therefore estimated a model including an interaction term between micro-firm size and competitive environment and between micro-firm size and quality of government. However, none of the interaction terms report significant values, and the main effects remain as reported in Table 4.2. I also estimated a model with a three-way interaction term, that is, between micro-firm size, competitive environment and quality of government. This three-way interaction term also was not significant. This builds confidence for the chosen approach to study direct effects of firm- and (perceived) context characteristics on bribery incidence.

Finally, I reanalyzed the effects of firm size on the likelihood of bribery. As mentioned previously, I find a positive but nonsignificant effect of size on bribery. In setting of a transition economy, however, it may be important to discuss the particular characteristics of micro firms and bribery. In transition economies, the overwhelming majority of the companies are (very) small—that is, have fewer than ten employees. Until recently, the existence of these micro firms was considered a problem. These firms are often owned by individual people or families, have limited financial assets, apply simple technologies and procedures, are short-term oriented, have small market shares and low demand, lack managerial expertise (e.g., marketing research, forecasting techniques), and in general have limited ambitions to grow (Liberman-Yaconi et al., 2010). Given their size, they are unable to utilize economies of scale, have limited access to

financial resources, and have difficulties to meet competition from large firms. Furthermore, it is argued that these firms have low levels of risk taking. Micro firms use personal or family capital and spend money only on what is essential for short-term returns. However, recently, the perspective on micro firms has changed. Many countries increasingly acknowledge the importance of these firms for the economic development of their nation-state in providing such assets as job creation, household income, and poverty alleviation (Acs et al., 1999). These firms are flexible, nonbureaucratic, and niche oriented (Lieberman-Yaconi et al., 2010). Given these benefits, researchers have suggested that these firms deliberately decide not to grow (Lieberman-Yaconi et al., 2010) and that they operate in the “informal sector”, which refers to the paid production and sales of goods and services of entrepreneurs who are unregistered or hidden from the state for tax and/or benefit purposes (Williams & Round, 2007). Micro firms do not want to enter into the formal sector, not only because of excessive registration costs but also because they want to hide from the arbitrary system of compliance control. Taken together, this may foster the best way to hide from public officials and, as such, it might be expected that micro firms are less likely to pay bribes. To test this latter proposition, I constructed a new measure for micro firms with a dummy that equals 1 if a company has fewer than ten employees and 0 otherwise. The summary statistics and regression results are in Tables 4.3 and 4.4. Of the observations (Table 4.3), 70.98 percent (411 firms) are micro firms.

Table 4.3 Correlations, Means and Standard Deviations (SD)

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. bribery	0.24	0.43	1.00													
2. formal educ.	10.64	2.65	0.10*	1.00												
3. informal educ.	1.02	2.62	0.21**	0.08	1.00											
4. sole prop.	0.52	0.50	0.09	0.07	0.07	1.00										
5. limited liability	0.11	0.31	0.09*	0.16**	0.06	-0.39**	1.00									
6. joint-stock	0.02	0.15	0.14*	0.13**	0.05**	-0.17**	-0.05	1.00								
7. electricity cuts	0.13	0.34	0.05	-0.10	0.03	0.14**	-0.01	0.05	1.00							
8. state bank debt	0.37	0.48	0.16*	-0.08	0.05	0.10*	0.02	0.04**	-0.03	1.00						
9. trade	0.50	0.50	-0.03	0.21**	0.03	0.04	0.02	-0.01	-0.08	0.00	1.00					
10. services	0.15	0.35	0.16**	0.03	0.07	-0.02	0.10	0.10*	0.05	-0.11	-0.44**	1.00				
11. micro firm size	0.71	0.45	-0.22**	-0.11*	-0.21**	-0.02	-0.22**	-0.11**	-0.13*	-0.15**	0.14**	-0.03	1.00			
12. firm age	0.77	0.76	-0.08	-0.27**	0.06	-0.14*	-0.19**	-0.04	0.03	0.02	-0.19**	-0.14**	-0.02	1.00		
13. competition	32.12	78.31	0.14*	-0.01	-0.02	0.03	-0.03	-0.02	-0.04	0.02	-0.11**	-0.02	0.16**	0.04	1.00	
14. government quality	2.52	0.88	-0.14*	-0.06	0.02	0.04	0.06	-0.09	-0.05	0.03	0.09	0.04	-0.03	-0.11**	-0.16**	1.00

* $p < 0.05$; ** $p < 0.01$, two-tailed test.

M = mean

educ. = education prop. = proprietorship

Table 4.4 Robustness analysis for the impact of firm characteristics and firm context on bribery incidence

control variables	1 bribery	2 bribery	3 bribery	4 bribery	5 β_P^{SY*}	6 β_P^{FS}	7 M.E.
<i>characteristics-entrepreneur</i>							
formal education	0.052 (0.055)	0.032 (0.057)	0.029 (0.056)	-0.007 (0.058)	-0.003	-0.009	-0.001
informal education	0.124 *** (0.044)	0.109 ** (0.045)	0.127 *** (0.045)	0.117 *** (0.044)	0.054	0.150	0.018
<i>characteristics-firm</i>							
firm ownership: sole proprietorship	0.814 ** (0.361)	0.709 * (0.371)	0.845 ** (0.373)	0.650 * (0.391)	0.303	0.151	0.100
firm ownership: limited liability	1.043 ** (0.479)	0.741 (0.522)	1.162 ** (0.489)	0.757 (0.526)	0.353	0.112	0.140
firm ownership: joint-stock	1.953 ** (0.879)	1.729 * (0.930)	1.821 ** (0.792)	1.550 * (0.835)	0.722	0.108	0.334
public service costs: electricity cuts	0.243 (0.347)	0.14 (0.358)	0.223 (0.361)	0.080 (0.371)	0.037	0.013	0.013
state bank debt	0.816 *** (0.279)	0.754 *** (0.285)	0.831 *** (0.286)	0.765 *** (0.295)	0.356	0.173	0.127
<i>characteristics-industry</i>							
trade	0.188 (0.329)	0.321 (0.357)	0.449 (0.357)	0.612 (0.390)	0.285	0.143	0.095
services	1.078 *** (0.406)	1.169 *** (0.430)	1.327 *** (0.419)	1.411 *** (0.446)	0.657	0.234	0.282

main variables	1 bribery	2 bribery	3 bribery	4 bribery	5 β_p^{SY*}	6 β_p^{FS}	7 M.E.
<i>internal forces</i>							
micro firm size		-0.697 ** (0.296)		-0.586 * (0.314)	-0.273	-0.125	-0.099
firm age		-0.102 (0.228)		-0.898 * (0.495)	-0.418	-0.299	-0.141
firm age squared				0.220 * (0.116)	0.103	0.255	0.035
<i>external forces</i>							
competition			0.004 ** (0.001)	0.004 ** (0.002)	0.002	0.169	0.001
government quality			-0.424 *** (0.160)	-0.472 *** (0.165)	-0.220	-0.191	-0.074
<i>constant</i>	-3.224 *** (0.631)	-2.401 *** (0.802)	-2.302 ***** (0.765)	-0.869 (0.978)			
<i>fitness indices</i>							
log pseudo likelihood	-170.852	-168.190	-163.38	-160.062			
wald χ^2	38.220	40.110	53.710	54.530			
prob > χ^2	0.000	0.000	0.000	0.000			
pseudo R ²	0.117	0.130	0.155	0.173			
observations	352	352	352	352			

robust standard errors in parentheses; *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$;

M.E = marginal effects

β_p^{SY*} = y-standardized coefficient;

β_p^{FS} = fully standardized coefficient

Two conclusions can be derived from Table 4.4. First, compared with Table 4.2, the estimates of parameter estimates for the main effects remain robust in terms of signs and significance.

Second, Table 4.4 shows that micro firms indeed are less likely to pay a bribe ($\beta = -.586, p < .10$). Taking these conclusions together, I conclude that firm size indeed matters for bribery, particularly for firms that are very small.

4.6 Conclusions

To date, corruption has a long-standing research tradition. This work adds to existing corruption research by attempting to explain the bribery phenomenon from a firm-level perspective in a transition economy. More in particular, the key assumption is that firms operating within the same country may vary in their propensity or willingness to pay bribes due to forces that result from either (1) factors specific to the firms or (2) factors specific to their perceptions of the environment. This firm-level line of research is valuable because it shifts the attention away from the demand side of corruption (i.e., the government) toward the supply side of bribery (i.e., the firm). Most policy discussions focus on public officials, who are assumed to initiate bribery, which is not always the case. Firms are different from one another in their response to forces and the way they react to government corrupt behavior. In line with the recent firm-level studies of bribery (Clarke & Xu, 2004; Svensson, 2003; Swamy et al., 2001), the objective of this study is to investigate how internal and external forces determine the incidence of bribery. The former relate to firm-specific characteristics and the latter to (perceived) contextual characteristics.

Building on a unique data set of 606 Vietnamese entrepreneurs, I am able to quantify bribery at the level of the firm and to measure the key concepts. The study demonstrates that the likelihood of bribery is determined by firm attributes (internal context) as well as the particular

external context in which firms are embedded. I found that the likelihood of bribery activities is determined by firm size, firm age, perceived quality of the government, and the perceived intensity of competition. Taken together, these characteristics substantiate my assertion that entrepreneurs offer bribes in a response to forces existing inside and outside the organization.

Thus, this chapter explains whether and how firms in a transition economy with weak institutions, such as Vietnam, are involved in corruption transactions. In so doing, this study provides empirical evidence for key elements of corporate illegality and anomie theory (cf. Martin et al., 2007). The theory of corporate illegality argues that in addition to motives and opportunities, there is a positive link in particular between force and the likelihood of illegal corporate behavior (Baucus, 1994). According to this theory, the characteristics of the environment and of the firm induce conditions of force that determine whether illegal behavior occurs.

This study suffers from several limitations, which offer opportunities for further research. First, the results highlight a size effect on bribery incidence albeit only when I account for a particular class of firms, that is, those with less than 10 employees (these firms are identified as micro firms in the literature). In line with other studies (e.g., Svensson, 2003; Vaughan, 1983), I use size as a proxy for underlying dimensions such as structure. Of course, it is a question to what extent the generic argumentation concerning size is generally valid for all of the underlying dimensions of size that I relate to bribery. Future research in particular may address this limitation and more explicitly account how structure and norms and ethics (that are now part of the size concept) relate to bribery incidence. In a similar vein, future research may analyze more complex models than the ones presented in this chapter. The models in this chapter present linear direct relations between firm- and context forces and bribery incidence that, according to my

empirical findings have merits. As a test of robustness, I explored the opportunity of interaction effects between a few of the main variables in my model. For example, I tested the perspective that micro-firms in a highly competitive environment are more likely to bribe because various internal and external forces may work in tandem for these particular firms in these particular circumstances. The empirical results for this robustness analysis of my main findings, however, indicate that this is not the case: the interaction term for micro-firms and the level of competition is not significant. Nonetheless, future research with data from other firm-level samples in other national contexts may test the aforementioned complexities and as such verify whether or not internal and external forces may reinforce each other in the likelihood of bribery.

Second, the use of cross-sectional data from Vietnamese entrepreneurs in the MRD limits the generalization of these results. To increase generalizability, future researchers could replicate this study in other transition economies such as China and Russia. Third, it is well-known that cross-sectional databases prevent intertemporal, causal analysis of processes that determine the outcomes observed with the use of a questionnaire. Future researchers could attempt to develop panel data sets and as such enable a more dynamic analysis of the bribery phenomenon. Third, the measure for bribery used here considers solely the payment of cash. However, the interaction between an entrepreneur and a public official may also incorporate other forms of bribery (e.g., gifts, visits to bars). New data with other bribery measures would enable testing the role of firm and context forces on different forms of bribery.

Chapter 5

The impact of personal networks on bribery incidence

5.1 Introduction

In the previous chapter and in recent work on bribery it has been shown that firm characteristics (e.g., firm size, firm age, firm profit, ownership structure) and the business environment (e.g., the quality of government service, the quality of legal environment, competition, regulatory burden) influence a decision to bribe (Chen et al., 2008; Clarke & Xu, 2004; Gaviria, 2002; Kuncoro, 2004, 2006; Wu, 2009). This contribution to the corruption literature is significant. First, it focuses on micro as opposed to macro, or country-level, determinants of bribery. Second, it shifts attention away from the demand side of corruption (i.e., the public officials) toward the supply side of corruption (i.e., the people or firms assumed to initiate bribery). However, firm managers do not operate in a vacuum. They are embedded in networks of personal relationships, and the characteristics of these networks may determine bribery. The web of social ties between agents and organizations is important because it may promote actions, create opportunities for the network members, and thereby generate value (Adler & Kwon, 2002; Yli-Renko et al., 2001). It may also determine a person's perception toward corruption, the more so when social relationships are used to achieve individual objectives. Despite this, little is known about the relationship between the network of an entrepreneur and bribery.

Social relationships have been considered important factors of the culture and the business transactions in Asian countries. That is, successful transactions in business depend heavily on social relationships in most Asian countries (Hitt et al., 2002). For example, in societies such as China, Japan, Korea, and Vietnam, social relationships among families, friends, and business partners are highly valued. In these countries, a network of relationships has become important and necessary to achieve favors and obtain better performance (Adler & Kwon, 2002; Coleman, 1990; Hitt et al., 2002; Uzzi, 1997). A successful manager in these societies is often considered a well-connected person rather than a wealthy one.

Particularly in the context of transition economy, cultivating a personal relationship with government officials can be viewed as a unique type of entrepreneurial capital, which is expected to improve the performance of (new) ventures (Nee, 1992; Peng & Luo, 2000; Peng & Zhou, 2005). Building a strong relationship with government officials can help firms to, for example, obtain goods and services, win contracts, cope with bureaucratic constraints, and obtain favors and protection not otherwise available (Xin & Pearce, 1996). In a transition economy context, bribery can be considered an investment that firms need to make to maintain a network of social relationships and operate successfully in a weak institutional environment (Peng & Heath, 1996).

Although the effects of personal relationships with government officials on firm performance have been investigated, whether and how personal relationships relate to bribery incidence is not addressed in detail. To the best of my knowledge, this study is among the first to investigate the impact of social ties on bribery. The study proceeds in two steps. First, I provide a literature review of the particular context in which bribery occurs. Second, following insights from social network theory, I develop an argument that explains how personal ties affect bribery incidence.

More in particular, I explain how different types of ties and network diversity influence the likelihood of bribery.

This research makes the following two contributions to the extant literature. First, it emphasizes the role of entrepreneurs as the unit of analysis in analyzing possible effects on bribery of personal relationships with government officials in the context of an institutionally weak transition economy. Second, and relatedly, regarding bribery, this study complements the existing corruption literature by moving attention from the demand side characteristics to the supply side determinants of bribery in a business setting in an Asian economy (Aidis & van Praag, 2007; Martin et al., 2007). Not all entrepreneurs pay bribes, and entrepreneurs respond to bribery demands differently. Entrepreneurs may vary in the strength and variety of personal ties with public officials. Thus, the study's key aim is to determine whether variation in these characteristics determines variation in bribery incidence.

5.2 Theoretical background and hypotheses

5.2.1 Bribery in the context of a transition economy

In the context of a transition economy, personal ties with government officials at various levels—such as officials in industry bureaus, regulatory- and supporting organizations (Peng & Luo, 2000)—can be viewed as a unique entrepreneurial resource that improves the performance of (new) ventures (Li & Atuahene-Gima, 2001; Nee, 1992) as well as foster private firm survival (Peng & Luo, 2000; Xin & Pearce, 1996). Personal ties help firms compensate for institutional failures. In a transition economy environment with weak institutional support and distorted

information, managers may cultivate personal ties (e.g., *blat* in Russia, *guanxi*⁹ in China) and use them when entering exchange relationships (Pfeffer & Salancik, 1978; Powell, 1990) and obtaining resources or protection not otherwise available (Xin & Pearce, 1996). Birley (1985) and Larson (1992) find that personal networks contribute greatly to the success of small firms. In this relationship context, bribe and favors can be conceptualized as an element of reciprocal gift exchange dedicated to the maintenance of relationships. The stronger the relationship with government officials, the more likely entrepreneurs are to be able to access resources, mobilize resources, and obtain goods and services, as well as attain favorable treatment.

In a discussion of the relationship between social ties and bribes, the context of a transition economy in general and characteristics of existing government systems in particular cannot be neglected. This is because the process of institutional change in a transition economy creates the institutional voids that result from decentralizing decision-making power in the government administration. The decentralization usually results in local administrators supervising the region, district, province, or village, and these officials have considerable discretion to, for example, raise taxes or handle licenses, even though this authority may be (imperfectly) constrained by formal central legislation. In particular, local officials are able to create complicated administrative procedures. Often, such procedures may conflict with regulation mandated by the central government. Such procedures may burden and confuse entrepreneurs because of unclear and overlapping regulation and lack of transparency. Firms may avoid the resulting administrative burden by paying a premium (Shleifer & Vishny, 1993). To put it differently, the lack of central state supervision and enforcement characteristic for a situation of

⁹ *Guanxi*, a Chinese term, refers to interpersonal connections or instrumentalpersonal ties that range from strong personal loyalties to ceremonial bribery (for a discussion, see, e.g., Fan, 2002; Xin & Pearce, 1996).

institutional change, together with local public officials' often low income, may increase the likelihood of the local public official asking for a bribe in an attempt to increase his or her standard of living.

In addition to the formal institutional voids due to institutional change in transition economies, there are informal effects. Processes of institutional change and the associated lack of institutional trust and uncertainty may create a segmentation of society, denoted as the hourglass society (Rose, 1995). In such a society, there is a sharp distinction between existing upper- and lower-class networks. Moreover, upper-class networks operate differently from lower-class networks. In upper-class networks, participating public officials are part of the elite network. Such elite networks are characterized by specific subcultural values and norms that may be distinctly different from lower-class networks. Moreover, the institutional elite have more reputation to lose and more contact with outsiders, particularly international outsiders. In line with Rose's metaphor, we suggest that personal ties with public officials in the different networks are subject to different norms and values that ultimately may lead to a different impact of the personal ties on the likelihood of bribery. In the upper-class network, due to the higher income levels, the need for bribes as a source of income is lower, and higher exposure to media and (international) outsiders creates the danger of reputation loss. Moreover, bribes may be culturally nonacceptable in the upper-class network. This contrasts with the needs and attitudes of the lower-class networks, in which the need to cope with low incomes and arguments of reciprocity can make bribes as gift exchanges acceptable as add-ons to business transactions.

5.2.2 The characteristics of personal networks

According to social network theory, a personal tie can be defined as any relationship, transaction, or interaction between two persons or all possible pairs of units (e.g., kinship, material transactions, behavioral interactions). A personal network, according to Dubini & Aldrich (1991), can be defined as the set of all persons with whom an entrepreneur has direct relations. A simple form of a personal network is a direct tie linking entrepreneurs to persons with whom they have direct transactions, such as services or consultants. The two most common types of personal networks¹⁰ are often personal ties with friends or relatives (Coleman, 1988; Granovetter, 1985) and business ties with executives of other firms such as suppliers, buyers, or competitors (Dubini & Aldrich, 1991; Larson, 1992; Peng & Luo, 2000; Uzzi, 1997). In addition, ties with public officials are considered another unique type of ties, especially in the context of a transition economy.

An understanding of the characteristics of the networks requires attention for the network structure and the content of ties. The network structure refers to the strength of ties that is determined by the quality of ties (Adler & Kwon, 2002; Yli-Renko et al., 2001) (e.g., their frequency, intensity, multiplicity) and the configuration of the ties (e.g., direct and/or indirect ties, network diversity, network size, network density), while the content of ties connotes shared norms, beliefs, and abilities (Adler & Kwon, 2002). Network diversity can be defined as the diversity of people a person can contact within his or her interpersonal environment (Marsden, 1987, 1990). Network diversity measures the degree to which an ego-centered network contains diverse alters, for example, demographic characteristics or occupation (Marsden, 1987; Renzulli

¹⁰ The terms “personal network”, “social network”, and “personal contact network” are frequently used in the entrepreneurship literature and can be understood as roughly interchangeable (O'Donnell et al., 2001).

et al., 2000). This study focuses on an ego-centered network, which consists of a focal actor, termed *ego*, and a set of alters who have ties to ego.

Ties or contacts may be of different kinds (e.g., formal or informal, direct or indirect, frequent or infrequent). Among these types, the distinction between strong and weak ties first proposed by Granovetter (1973) is particularly germane to the contact issue. By differentiating between strong and weak ties, Granovetter (1973) describes how the diversity, homogeneity, and heterogeneity of these ties affect people's actions. Tie strength thus can be defined as a function of three factors: the frequency of contacts, reciprocity (i.e., favors and obligations), and friendship. Strong ties pertain to frequent contacts that almost constantly have affective, often friendly, overtones and may include reciprocal favors. In contrast, weak ties are infrequent contacts because they are episodic and do not necessarily have an affective content. Strong ties are used to mobilize political resources and solidarity¹¹, whereas weak ties are exerted to obtain the transmission of novel information and diffusion of innovation (Nelson, 1989). Strong ties can be measured, for example, by self-reports of receiving support from friends and family, and weak ties are proxied by support from business partners and acquaintances (Brüderl & Preisendörfer, 1998). Granovetter's (1973) "strength of weak ties" hypothesis is widely known in various fields; it has fueled the debate on the relative value of strong versus weak ties. Strong ties are found to be more beneficial as they generate trust and cooperation between the actors (Ahuja, 2000), and facilitate the exchange of high-quality information (Gulati, 1998), complex knowledge (Hansen, 1999), and tacit knowledge (Lundvall, 1993). Coleman (1990) & Burt (1992) suggest that actors who are better connected have a competitive advantage over poorly

¹¹ Solidarity is a form of strong social norms and beliefs associated with a high degree of closure of the social network (Adler & Kwon, 2002).

connected actors. Using a sample of 1700 German founders, Brüdel & Preisendörfer (1998) find that strong ties are more critical than weak ties in explaining firm survival.

These studies and findings offer important input for understanding different types of ties. I suggest that not all types of ties are equally conducive to bribery. I argue that strong ties are important to explain bribery in the context of a transition economy. Strong ties are likely to be based on long-term relationships, high levels of closeness or intimacy, (particularized) trust, loyalty, and shared norms, which ultimately enforce reciprocity between group members and thereby lead to a greater probability of bribery.

5.2.3 Hypotheses development

As mentioned previously, in a transition economy, ties with public officials are needed, for example, to obtain official government approval for potentially lucrative public contracts or services (Djankov et al., 2002). Strong ties with public officials are necessary because if not, firms face hurdles to make an economic exchange and an increase in transaction costs due to incoherent and ever-changing business regulations. I suggest that with strong ties, entrepreneurs are more likely to pay a bribe because it is considered a gift that is an intrinsic element of the relationship with the public official. The gift is based on reciprocity, the favor of a lower administrative burden. Moreover, it is difficult to make the exchange in another way given the weak institutional environment. Warrent et al. (2004) suggest that firms offer money or other forms of compensation—such as hiring unqualified employees who are relatives of local government leaders and placing them in important positions or having a government bureaucrat on their boards (cf. Fan et al., 2007)—to establish relations with the local authorities.

Strong ties and bribery

Strong ties are expected to foster bribery, for several reasons. First, when ongoing personal interactions between government officials and entrepreneurs are extensive, the opportunities for engaging in bribery transactions increase (Buchan, 2005; Collins et al., 2009). Thus, the frequency of interactions and the amount of time entrepreneurs spend with the government official are expected to be positively correlated to bribery (Kaufmann & Wei, 1999). Furthermore, strong ties (e.g., those established through private conversations and assorted meetings) foster the willingness to engage in bribery. Because of the tacit and risky nature of bribery, government officials and entrepreneurs require time to build mutual understanding and trust before they will engage in these transactions. This is in line with Lave & Wenger (1991), who claim that new members of a network remain peripheral for a while so that they can internalize tacit meanings, norms, and values of behavior in socialization and habituation. Second, entrepreneurs who have strong ties with government officials are more likely to pay a bribe due to reciprocal nature of strong ties. When a person embeds within a social relationship (e.g., a family, an organization), the identification with the group leads to shared norms and creates the expectation or obligation to support others in the group (Coleman, 1990; Uzzi, 1997). Moreover, strong ties are sentimental and personalized and imply reciprocity with mutual obligations, shared interests, and long-term commitments to perpetual exchanges (Li, 2007; Lin, 2007; Uzzi, 1997). With such characteristics, strong ties are more like a friendship or a family relationship. Relationships with friends and family are characterized by frequent contacts and emotional closeness. Such ties facilitate reciprocity, cooperation toward the inside members, high levels of trust, and in-group loyalty to the member's interests at the expense of outsiders. Consequently, it increases in-group favoritism behavior (Harris, 2007). Banfield (1958) shows that in Southern Italy and Sicily, people are more likely to provide illegal favors and preferential

treatments to relatives when the value of family loyalty is high. This result is also supported by Lipset & Lenz's (2000) country-level study, which suggests that countries with high scores on familism tend to be more corrupt. Moreover, other scholars show that managers with strong relationships with government officials may more readily consider engaging in corruption because of a sense of social obligation (Coleman, 1988; Collins et al., 2009; Westphal & Zajac, 1997). This is particularly relevant if government officials need to rely on illegal payments for facilitating government services to obtain higher income levels (Kwok & Tadesse, 2006). Strong ties are likely to trigger bribery because they may help firms reduce the likelihood of opportunism in the absence of enforcement of agreements (Nahapiet & Ghoshal, 1998). Taking the preceding factors into account, I predict a positive relationship between strong ties with public officials and bribery incidence.

As argued previously, in a transition economy, both upper- and lower-class networks are characterized by strong ties. There are several various reasons why the effect of strong ties on bribery will be different in the two networks of the society. First, administrative decentralization due to economic policy reforms that characterize a transition economy provides discretion to lower-class government officials. In addition, the lack of state control increases the possibility that a low level official will ask for a bribe. Furthermore, lower government officials need to supplement their income to obtain a decent standard of living, which increases the need for bribery demands.

Second, central government officials are less likely to have the opportunity to extort bribery in daily businesses that are largely delegated to local government officials. Moreover, they may receive higher incomes. In addition, bribes can be culturally nonacceptable in the elite network, to which central government officials may belong. Consequently, the risk of losing reputation,

status, and respect in the elite network is greater, which is likely to decrease incentives to engage in bribery transactions. Given these risks, strong ties with government officials may be built more adroitly on the basis of value-added services such as educational or training trips outside the country (Quelch & Tan, 1998), further reducing the likelihood of bribery transactions.

Third, local government officials may have more opportunities to extort bribes because they are better able to tightly manage and closely supervise firms in the local area (Walder, 1995, p. 294). Thus, a local official's interest in personal income is more likely to be translated into entrepreneurial behavior (Walder, 1995). For example, local tax officials are entitled to impose an arbitrary tax measures on firm sales. Thus, entrepreneurs are more likely to pay a bribe to local officials to avoid an arbitrary amount of tax.

Taken all arguments together, I hypothesize the following:

Hypothesis 1 (H₁). *Strong ties with local officials are positively related to the likelihood of paying bribes.*

Hypothesis 2 (H₂). *Strong ties with government officials are negatively related to the likelihood of paying bribes.*

Network diversity and bribery

Prior empirical work has suggested that there is a positive relationship between the diversity of a person's networks and performance (Pelled et al., 1999). Strong ties may limit the ability to access opportunities outside a group, whereas diverse contacts may produce more opportunities from different social relations. Network diversity can help firms to enhance ideas and cognitive resources, gather information, and improve the problem-solving capacity of the group because of knowledge heterogeneity as well as diverse experience (Beckman & Haunschild, 2002; Granovetter, 1973; Hambrick et al., 1996). Having diverse personal ties between communities

benefit people in such areas as access to jobs and promotions (De Graaf & Flap, 1988), increased opportunities for entrepreneurship (Dubini & Aldrich, 1991), and power in negotiations (Brass & Burkhardt, 1993; Burkhardt & Brass, 1990). For example, a diverse network with bankers, relatives, and friends would increase a firm's ability to access to bank loans as well as other sources of finance (Nguyen et al., 2006; Winborg & Landstrom, 2001).

Few studies have addressed the correlation between network diversity and corruption (Choi, 2007; Wise & Tschirhart, 2000). In line with the arguments of closed networks, which refer to the degree of (strongness) closeness of the relationship among families and friends within inward-looking group (Hwang, 1987), we hypothesize that there is a negative relationship between network diversity and bribery. This is because the diversity of the ego's networks is likely to reduce dependence, cohesion, and conformity; a bureaucrat's feeling of elitism; and core values that are cultivated in a (strong) closed network.

Thus, network diversity may decrease the likelihood to engage in bribery for several reasons. First, network diversity may increase the scope of opportunities open to entrepreneurs to gain access to similar resources at a lower cost. The number of weak ties is higher than that of strong ties when entrepreneurs increase the diversity of their networks. Weak ties provide more (unique) information, with low maintenance costs and often even more new ideas than are generated with strong ties (Burt, 2004; Kontinen & Ojala, 2011). Second, diversity may decrease trust between corruption partners. Furthermore, given different characteristics of a widely dissimilar groups or members, diversity may trade off risks of trust reduction (i.e., a decline of the values established over a long time within inward-looking groups, e.g., those with similar interests, reciprocity), and loyalty within a closed network. This is likely to decrease the

incentives to pay a bribe because of an increase in the alternatives to rule-breaking behavior available to entrepreneurs. Therefore, I hypothesize the following:

Hypothesis 3 (H₃): *Network diversity is negatively related to the likelihood of paying bribes.*

5.3 Research Methods

5.3.1 Control Variables

I included several variables to control for individual and organizational characteristics and opinions about bureaucratic burden. In line with macro-level studies, formal education is expected to have a negative relationship on bribery likelihood. The main reason is that a more educated society would be expected to bribe less (Gatti et al., 2003; Rest & Thoma, 1986; Treisman, 2000). In this study, formal education was measured by a dummy variable that equals 1 if the manager obtained a university degree in economics and 0 otherwise. Gender of the entrepreneur was measured by a dummy variable that indicates 1 for men and 0 for women. Men are more likely to pay a bribe than women because they are more active in the labor market than women and are thus expected to be more frequent targets of bribery (Mocan, 2008; Mocan & Rees, 2005; Swamy et al., 2001). In addition, men tend to behave in a more risk-taking manner (Paternoster & Simpson, 1996) and take fewer stances on ethical behavior (Glover et al., 1997). Top manager's age was measured by subtracting the year the manager was born from the current year. Because of their experience, older managers are expected to be less prone to corruption because they are less involved in bureaucratic procedures (Cabelkova & Hanousek, 2004; Gatti et al., 2003).

I control for a change of member status of social groups, which is defined as the difference in membership status at present and that in the past. This variable is measured by subtracting the

existing number of direct ties an entrepreneur is involved with in various social groups (e.g., political parties, youth unions, labor unions, clubs, social organizations), from the number of direct ties that an entrepreneur had previously. A positive value indicates an increase in the number of new direct ties. It is argued that when the number of personal relationships increases, entrepreneurs are more likely to engage in bribes because of the increasing corresponding risks of malfeasance and increasing conflicts of interests (Buchan, 2005; Velthouse & Kandogan, 2007).

I also control for the phase in the life cycle of a company. For this, I constructed a dummy variable (labeled “startup firm”) that equals 1 for firms two years of age and younger (and 0 otherwise) to understand whether there are differences in the propensity of bribery practices between young or old firms. I expect that bribes help startup firms to develop a network of relationships with government officials, which, in turn, helps them overcome liabilities of newness as well as to achieve legitimacy (Peng & Luo, 2000). There are different forms of ownership.¹² Firm ownership was measured by a dummy variable that equals 1 if the firm was a sole proprietorship (and 0 otherwise). A single proprietor has a strong motive to maximize his or her company performance, which offers more incentives and opportunities to bribe due to the absence of supervision forms (De Jong et al., 2010).

The respondents varied in their opinions about bureaucratic burden. It is well-known that a firm’s willingness to pay bribes is a function of government-related burden (Kuncoro, 2006). Less business-friendly institutions are more likely to increase an entrepreneur’s likelihood of

¹² The type of ownership in Vietnam is determined by the Central Institute for Economic Management. The rights and obligations per ownership type are specified in the Enterprise Law (CIEM, 2005), which specifies five main ownership types: sole proprietorship, limited liability company, shareholding company, family business, and collectives.

becoming involved in corruption (Tonoyan et al., 2010). I measure this issue with a five-point Likert scale (1 = “strongly disagree,” and 5 = “strongly agree” on the statement “In the last three years, all business licenses are difficult to obtain, they cost much time to come and pick up and other costs”). Bribe enforcement in this study is indicated by the degree of enforcement of paying a bribe measured on a five-point scale (1 = “completely involuntary bribe payments,” and 5 = “completely voluntary bribe payments” on the statement “paying an amount of cash to ‘lubricate’ your business affairs is completely forced... [or] completely voluntary” (Chen et al., 2008, p. 232).

5.3.2 Dependent and independent variables

In this study, bribery is defined as the cash payment an organization makes with the purpose of influencing the actions of a public official (De Jong et al., 2010). The likelihood of bribery was measured by a dummy variable that takes the value of 1 if the firm reports having paid money to government officials to conduct their business, and 0 otherwise. The specific question in the questionnaire was as follows: “Monthly, how much must your enterprise pay to ‘lubricate’ its business affairs?” The question was asked in Vietnamese. We used the usual forward and backward translation process to obtain the English version. The expression *bôi trơn* in the original Vietnamese question literally means “to lubricate”. This is a colloquial, synonym to money paid as bribes at government offices or administrative regulators. The closest English equivalent is “to grease someone’s palm”. In the survey, we explicitly defined “to lubricate” as money spent. The measure does not include other forms of bribery such as gifts that may have monetary value as well. The measure is similar to the ones Transparency International and the World Bank use.

To test the main hypotheses, I measure two dimensions that characterize the network structure: the strength of the ties and network diversity. For strong ties, we make a difference between ties with local officials and ties with government officials. Unlike government officials, local officials are civil servants in the local villages who are at the lowest level of the government's hierarchical bureaucratic system and work at the place where the company is located. The strength of ties with local officials was measured by the perceived quality of the ties that the managers had during the past three to five years (cf. Yli-Renko et al., 2001). In line with Yli-Renko et al. (2001) and Adler & Kwon (2002), the quality of the ties in this study can be characterized by goodwill trust, reciprocal expectations, a high degree of frequent contact, and (intimacy) closeness. Strong ties with local officials were measured by a dummy variable that equals 1 for a manager's ties are (very) good quality and 0 otherwise. Ties with government officials were measured by a five-point Likert scale (1 = "poor quality," and 5 = "very good quality"). The question for these relationships is "What is the quality of the personal ties of the managers with local authority/government agencies during the last three or five years?"

Diversity of ties refers to the heterogeneity in network partners (i.e., alters). A manager maintains ties with persons in different groups. This study measures the diversity using a count variable is derived from asking respondents about their connections to other groups: "Are you now a member of (a) youth union, (b) communist party, (c) labor union, (d) trade union, (e) social organization?" and "Do you have a family relative or close friend who works for (a) government agency, (b) state-owned enterprises, (c) private enterprises?" The score is the number of different groups with which a manager has ties. Next, using Marsden's (1987) index of qualitative variation formula, I measured the ego-centered network diversity for the i^{th} ego with N alters, where alters are classified into K discrete or ordered categories, considering the

squared of the proportion (p_j^2) of alters in the j^{th} category. I measured network diversity as the probability of randomly choosing people with two different attributes from the possible eight attributes mentioned previously. Thus, network diversity with the following formula:

$$Diversity_i = 1 - \sum_{j=1}^K p_j^2$$

A diversity score of 0 indicates a perfectly homogeneous network, and a diversity score of 1 this implies a perfectly heterogeneous network.

5.3.3 Estimation procedures

I use a (logit) binary choice model to empirically test the hypotheses (cf. Chen et al., 2008) while controlling for individual characteristics, organizational characteristics, and opinions about the bureaucratic system. A firm has a choice to pay a bribe to public officials or not. From the perspective of expected utility maximization (Svensson, 2003), a firm will pay the bribe if the expected utility from this action is greater than the expected utility of not paying it. Because the expected utility of paying the bribe is unobservable, we model the difference between the expected utility of paying bribe and not paying the bribe as follows:

$$y^* = \beta'x_i + \varepsilon, \quad (1)$$

where y^* is latent unobservable difference in expected utilities. The x_i vector represents the characteristics of personal ties, networks, and control variables affecting the likelihood of bribery and the β' vector is the corresponding parameters. ε is assumed to have a logistic (logit model) distribution.

I do not observe the latent variable y^* , but I do observe whether a bribe has been paid out. Thus, the y binary variable can be defined as follows:

$$y = 1 \text{ if } y^* > 0, \text{ and} \quad (2)$$

$$y = 0 \text{ otherwise.} \quad (3)$$

It follows that

$$\text{Prob}(y_i=1 | x_i) = \text{Prob}(\varepsilon + \beta'x_i) = F(\beta'x_i), \quad (4)$$

where F is the cumulative distribution function of ε (Greene, 2003). The probability of observing an event given x is the cumulative density evaluated at $x_i\beta'$. The logit distribution is given by

$$\text{prob}(y_i = 1 | x_i) = \frac{e^{\beta'x_i}}{1 + e^{\beta'x_i}} = \Lambda(\beta'x_i) \quad (5)$$

I estimate the logit form because I assume a bell-shaped distribution for ε that has thicker tails than a standard normal distribution. Maximum likelihood procedure is used to estimate the parameters of the binary choice model. To specify the likelihood equation, I define p as the probability of observing whatever value of y was observed for a given observation:

$$p_i = \begin{cases} \Pr(y_i = 1 | x_i) & \text{if } y_i = 1 \\ 1 - \Pr(y_i = 1 | x_i) & \text{if } y_i = 0 \end{cases} \quad (6)$$

where $\Pr(y_i=1 | x_i)$ is defined by Equation 4. If the observations are independent, the likelihood equation is

$$L(\beta | y, X) = \prod_{i=1}^N p_i \quad (7)$$

It is impossible to compute the variance of y^* from the observed data or if the variance of y^* is unknown, so the meaning of the partial change for each β in y^* is not clear (Long, 1997, p.70). To interpret the coefficients of the explanatory variables, I compute the β standardized coefficients (Long, 1997). Assuming that σ_{y^*} is the unconditional standard deviation of y_i^* , the y_i^* standardized coefficients can be calculated with respect to x_i , which indicates that for a unit increase in x_i , y_i^* is expected to increase by $\beta_p^{SY^*}$ standard deviations, holding all other variables constant. Assuming that σ_x is the unconditional standard deviation of x_i , the fully standardized coefficient for x_i can also be calculated, which indicates that for a standard deviation increase in x_i , y_i^* is expected to increase (or decrease) by β_p^{FS} standard deviations, holding all other variables constant.

To determine the partial change in the probability of bribery, marginal effects for the logit model are computed following Long (1997, p.74). The marginal effects depend on the magnitude of the β s for all variables and the levels of all x 's—values of other variables, $x\beta$, because f is computed at $x\beta$, as follows:

$$\frac{\partial \Pr(y = 1 | \bar{x})}{\partial x_k} = f(\bar{x}\beta)\beta_k \quad (8)$$

5.4 Results

Sometimes, the sample contains missing observations for particular items. I deleted all observations with missing values for any questionnaire items in order to attain a complete sample with 111

observations for regression analysis. I prefer to work with a conservative dataset albeit that bias may exist because I exclude cases for which (partial) information is lacking. Table 1 provides descriptive statistics and correlations. Of the observations, 60 percent (95 firms) reported that they did pay bribes. According to our data, for the firms reporting positive bribes and for the firms reporting zero bribe payments, the yearly average amount of bribes that firms paid was VND 94.03 million (US\$ 5273,10 with the 2009 official exchange rate of VND 17,832 to US\$ 1). On average, the quality of ties with government officials that entrepreneurs have are from good to very good (of the observations, 87.56%). Ties with local government officials also show, on average, a (very) good quality (of the observations, 91.28%). A network diversity average score of 0.98 implies a heterogeneous network (ties a manager has with the number of different groups). Almost all managers have ties with different groups.

To test the hypotheses, I regress tie strength and network diversity on bribery incidence while controlling for opinions about bureaucratic burdens, individual people, and firms. Before running the logit model, I investigated whether being corrupt is driven by a different process from the level of corruption, given that entrepreneurs are corrupt. For this, I use the Heckman two-step or Tobit-2 procedure, which includes two submodels to explain the amount of bribery: the probit (or logit) and the ordinary least squares. The idea is that if the second submodel (OLS) is estimated and I ignore the link to the first submodel (probit/logit), the estimators are not consistent (Cameron & Trivedi, 2005). The results from the Heckman model, however, show no connection between these two stages, with insignificant values for the Mills ratio ($B = 48.23$; and nonsignificance with $p = .45$). Thus, sample selection issue is of less concern, and thereby, I conclude that logit or probit models are an appropriate choice. I therefore continue with the one stage approach.

I estimated a logit model differentiating bribing from nonbribing firms. Table 2 presents the results. Model 1 includes the control variables. In Model 2 the main effects are added to the control variables. All coefficients are estimated with robust standard errors. Variance inflation factors did not report multicollinearity between constructs. The max variance inflation factor value is 1.93, far below the threshold value of 10 (Chen et al., 2008).

Table 5.1. Correlations, Means and Standard Deviations (SD)

	Mean	Std. Dev.	1	2	3	4	5	6	7	8	9	10	11	12
1. Bribery	0.60	0.49	1.00											
2. Ties with local government officials	0.91	0.28	.14	1.00										
3. Ties with government officials	3.81	0.96	-.01	.53**	1.00									
4. Change in member status	-0.08	0.58	.11	.03	.06	1.00								
5. Network diversity	0.98	0.01	.01	-.12	-.18**	-.39**	1.00							
6. Bribe enforcement	3.49	0.85	-.19*	-.04	.19*	-.06	.01	1.00						
7. Business license	2.51	0.89	.22**	.11	.01	.07	.00	-.29**	1.00					
8. Manager's age	44.23	9.39	.06	.10	.07	.12	.06	.11	.00	1.00				
9. Gender: Male	0.84	0.37	-.18*	.01	-.04	.01	-.03	-.12	-.05	-.06	1.00			
10. Manager's education: diploma in economics	0.42	0.50	-.06	-.07	.05	.04	-.13	.20**	.04	-.09	.05	1.00		
11. Firm lifecycle: start-up firm	0.24	0.43	.00	-.05	.08	-.15*	.04	-.04	-.05	-.29**	-.06	-.11	1.00	
12. Firm ownership: sole proprietorship	0.33	0.47	.28**	.11	-.10	-.05	.12	-.01	.04	.11	-.14	-.27**	-.16*	1.00

*, Correlation is significant at the 0.05 level (2-tailed).

**, Correlation is significant at the 0.01 level (2-tailed).

Table 5. 2. The Impact of Personal Networks on Bribery Incidence

variables	model 1	model 2	β_p^{SY*}	β_p^{FS}	marg. effects
main effects					
ties with local governm. officials		3.444 *** (1.177)	1.223	0.352	0.693
ties with government officials		-1.146 *** (0.375)	-0.407	-0.395	-0.203
network diversity		4.385 (19.355)	1.558	0.024	0.777
control					
change in member status	0.845 * (0.415)	1.228 * (0.647)	0.436	0.274	0.217
bribe enforcement	-0.970 *** (0.355)	-0.887 ** (0.353)	-0.315	-0.272	-0.157
business license	0.447 (0.327)	0.572 * (0.296)	0.203	0.164	0.101
manager's age	0.041 (0.026)	0.048 * (0.027)	0.017	0.170	0.008
gender: male	-2.036 *** (0.733)	-2.835 *** (0.936)	-1.007	-0.403	-0.314
manager's education: d.e.	0.694 (0.581)	1.130 * (0.614)	0.401	0.199	0.190
firm life cycle: start-up firm	1.386 ** (0.549)	2.123 *** (0.674)	0.754	0.325	0.277
firm ownership: sole-proprietorship	1.584 *** (0.580)	1.332 ** (0.636)	0.473	0.229	0.214
constant	2.085 (1.750)	-1.252 (19.563)			
log likelihood	-54.537	-47.501			
pseudo R ²	0.2281	0.328			
wald chi ² (7)/ wald chi ² (11)	19.68	24.520			
prob > chi ²	0.006	0.011			
observations	111	111			

marg. effect = marginal effect

d.e. = diploma in economics

standard errors in parentheses. *** p<0.01; ** p<0.05, * p<0.1;

 β_p^{SY*} = y-standardized coefficient; β_p^{FS} = fully standardized coefficient

To check whether the logit model is suitable, I use the Hosmer-Lemeshow test for goodness-of-fit., which measures the predicted and observed frequencies; they should match closely, and the more closely they match, the better the fit. This is confirmed in the model (Hosmer-Lemeshow $\chi^2 = 10.97$; nonsignificant with $p = .20$). The first column of Table 2 presents the partial change in y^* ($\beta_p = \partial Y_i^* / \partial X_p$) with all control variables and the corresponding p -values. The second column of Table 2 presents the full model. The third and the fourth columns report the Y_i^* (β_p^{SY*}) standardized coefficients and the results of the fully standardized coefficients for X_p ($\beta_p^{FS} = \sigma_p \beta_p / \sigma_{Y^*} = \sigma_p \beta_p^{SY*}$), respectively. The fifth column presents the marginal effects.

H₁ considers the effect of strong ties on bribery incidence. Table 2 shows that strong ties with local officials are positively associated with a firm's likelihood to pay bribes, as expected ($\beta = 3.44$; $p < .01$). Thus, strong ties with local officials are a relevant determinant of bribery incidence. H₂ states that the likelihood of bribery is negatively related to strong ties with government officials. The results confirm the expected negative effect of strong ties with government officials on the likelihood of bribery ($\beta = 1.15$; $p < .01$). H₃ predicted that firms with great network diversity are less likely to pay bribes. This hypothesis is not supported ($\beta = 4.38$; n.s.). I hypothesized that network diversity may increase the alternatives for rule-breaking or opportunistic behavior for entrepreneurs (Brass & Burkhardt, 1993) or reduce trust and loyalty between corrupt partners within a closed corrupt network (Harris, 2007) and hence decrease incentives to bribe. The empirical results do not support this perspective. A possible explanation for this non-significant finding is the following. First, the effect of network diversity on bribery likelihood may be moderated by the characteristics of the network ties. For instance, Choi (2007) suggests that only firms that have strong links with (former) bureaucrats whose jurisdictions are

strongly related to their business can benefit more from enhancing collusive relations with the government (e.g., for relevant policy-related information) than those without such strong ties with (former) bureaucrats. Second, although diversity may increase the number of (new) ties (that, as argued, has a negative impact on the firm's likelihood to bribe), these (new) ties may not directly relate to the corrupt network (Wise & Tschirhart, 2000).

The results are obtained while controlling for a substantial number of other bribery determinants. Some of these determinants are significant and provide insights for firm-level bribery in transition economies. The impact of bribe enforcement on the likelihood of bribery is negative and significant ($\beta = .89$; $p < .05$). Bribery is thus influenced by the degree of enforcement. The higher the level of the voluntariness, the less likely entrepreneurs pay a bribe. I find a significant and positive effect of bureaucratic burden on the likelihood of bribery ($\beta = .57$; $p < .05$).

Table 2 reports that older managers are more likely to pay bribes ($\beta = .05$; $p < .10$). One reason for this is that older people become more sensitive to the threats of sanctions, more dependent on the reactions of others, and more susceptible to the potential costs of sanctions if a bribe is not paid (Tittle, 1980). I find that the likelihood of bribery is different for men and women. In contrast to my expectation, however, men are less likely to engage in bribes. An explanation for this may be that women are on average more honest and also more compliant to, for example, tax payments than men (Swamy et al., 2001; Tittle, 1980). The impact of formal education on bribery incidence is positive and significant and also somewhat counterintuitive ($\beta = 1.13$; $p < .10$). Bribery involves uncertainty and ambiguity. For this reason, better educated entrepreneurs may be better able to plan and play bribery games to their advantages than others

(Guerrero & Rodríguez-Oreggia, 2008). In line with my arguments, a change of member status is indeed positively related to the likelihood of paying a bribe ($\beta=1.23$; $p < .10$).

I also find significant evidence for the impact of the firm's life cycle on the likelihood of bribery ($\beta = 2.12$; $p < .01$). This result confirms that young firms are more likely to pay bribes than established firms because it helps young firms to develop a network with government officials, which, in turn, helps them to overcome liabilities of newness (De Jong et al., 2010). In addition, I find significant support for single proprietorship and the incidence of bribery ($\beta = 1.33$; $p < .05$), confirming the importance of this control variable.

5.5 Conclusions

This study theoretically and empirically investigates the relationship between two different types of personal ties—ties with local officials and ties with government officials—and the likelihood of bribery. The results suggest that personal ties with local government officials affect the likelihood of bribery. Overall, this confirms the assumptions of strong ties. Strong ties reinforce exclusive identities, encourage in-group loyalty and particularized trust toward the members within a group, and thus discourage trust and cooperation toward outsiders. These factors increase the incentives of and the opportunities for illegal practices such as bribery, nepotism, and favoritism. Entrepreneurs with strong ties with local government officials may engage in bribes because they accept the norms of reciprocity or “normative rules” within a corrupt network that are strictly enforced (Della Porta & Vannucci, 1999). If they break such rules, they may suffer personal costs (costs of not paying bribes) and other risks (e.g., being excluded from the network, getting caught or punished by authorities or outsiders). In this network, the moral costs associated with corruption are likely to be less because bribery is considered “a good return

to favor” within a group. This finding aligns with Lipset & Lenz’s (2000) macro study results, which indicate that corruption is greater for countries with high scores on familism.

In line with my hypothesis, entrepreneurs who have strong ties with high-level government officials are less likely to engage in bribes. This result confirms my rationale as to why there are different effects of strong ties on bribery in the two different networks. This finding also indicates a counterintuitive interpretation compared with the assumptions of strong ties. Entrepreneurs with strong ties with high-level government officials may not engage in bribes because high-level government officials may earn higher income and thus do not need a bribe in return. In addition, bribe payment is not culturally accepted in the elite network because high-level government officials face a high risk of losing face, reputation, position, which is likely to lower the incentives to engage in a transaction of bribes. Therefore, the results suggest the necessity for researchers to conceptually differentiate the two types of strong ties with government officials—that is, low (local)- and high-level government officials—especially when conducting research in transition economies where government still plays a key role.

Regarding the configuration of ties, the findings indicate that network diversity is not a relevant variable in determining the likelihood of bribery. The idea is that the greater the diversity of alters entrepreneurs possess in an ego-centered network, the less likely entrepreneurs engage in bribery because of a decline of path dependency¹³, “lock-in” risks¹⁴, cohesion,

¹³ This is because network relationships built over time become self-reinforcing, thereby leading to a form of path dependency (see Hitt et al., 2002).

¹⁴ Lock-in risks result from specific investments because specific investment is valuable only in a specific relationship and therefore yields switching costs. Thus, a long relationship is required to recoup the initial investment.

particularized trust, feelings of obligations, and core values that are fostered in a corrupt network (Choi, 2007).

In summary, this research develops and tests hypotheses how personal ties matters to firm-level bribery activities in the context of Vietnam's transition economy. Such an investigation of network determinants of bribery is scarce and theoretically underdeveloped (cf. Tonoyan et al., 2010). Few scholars have taken on the challenge of specifying whether and how personal ties attribute to bribery incidence for entrepreneurs. This research is a first step in this direction. I explain the link between strong ties and the likelihood of bribery. By so doing, I extend the theory of (bonding) social capital and corruption.

The data make it possible to quantify bribery at the organizational level and to measure the key concepts. Although case study literature on corruption provides insights of single bribery-related events, processes, structures, and methods of bribery in practice, it is limited with respect to the generalization of results. My efforts to acquire a relatively large sample of companies have provided both factual information and subjective interpretations regarding the role of personal ties and bribery in entrepreneurship.

5.5.1 Policy implications

The most important implication of this study is an appropriate understanding of the relationship between corruption and different types of ties. The reason is that entrepreneurs may vary in the strength and variety of personal ties with public officials, thereby leading to a various response in bribe transactions. Building a relationship with a local government official's networks may honor in-group favor, a close-knit group, loyalty, and particularized trust that fosters nepotism

and favoritism. As a result, the incidence of corruption seems to be more rather than less in the transition society. It is argued that a high level of particularized trust toward bureaucrats can augment an entrepreneur's likelihood payoff paying a bribe. From a policy perspective, the question is how corrupt agreement can be circumvented given that at the macro level, it has negative effects for growth and welfare.

First, a weakening of particularized trust between the bureaucrat and the businessperson is necessary to limit corruption. Lambsdorff & Nell (2006) suggest implementation of legal sanctions that destabilize corrupt deals by introducing regular staff rotation in the public administration. Second, if strong ties facilitate bribery practices, it may cause harmful effects for outsiders (potential bribe payers). This also means that to circumvent bribery practices, entrepreneurs need to have the arrangement of a collective action against bribery, because everyone becomes better off if they all mutually commit not to pay bribes. Kingston (2005) suggests that the level of corruption in Indian states actually decreases when citizens build up informal norms against bribery or commit not to pay bribes. Third, the causes of corruption in transition economies can derive from deep roots of social norms and culture in general and the business environment in particular. For example, people may justify that "if others behave illegally, so can I" (Lefebvre, 2001). Therefore, the change of social norms and the enrichment of business environment together with developing anticorruption campaigns may be considered as the core of the subject in attempting to lowering corruption. It takes a long time to change norms in a society. The policy measures need to be persistent.

5.5.2 Limitations and Further Research

The first limitation of this study is that cross-sectional data from Vietnamese entrepreneurs in the Mekong River Delta is used, which limits the generalization of the results. The use of cross-sectional data prevents intertemporal, causal analysis of processes that determine the outcomes observed with the use of a questionnaire. Further research could search for a longitudinal or panel study that incorporates bribery events over time so that a direct causality between individual preconditions and firm-level corruption may be identified.

Second, this study did not investigate indirect links between strong ties and the likelihood of bribery due to data limitations. Strong ties may affect corruption not only directly but also indirectly by, among other things, potential mechanisms that reduce opportunistic behavior of the bribers and thus make corruption more predictable (Harris, 2007). Further research could fill this gap by investigating whether entrepreneurs are confidently able to predict that the goods will be delivered as agreed in a corrupt transaction.

Third, future studies could replicate this research in other Asian or transition economies. In addition, a more liable and valid measure of firm competitiveness within a complex set of strategy given ever-changing institutions in transition economies is also necessarily warranted (Peng & Luo, 2000). In this study, the measure of bribery considers solely payments of cash. Thus, it would be worthwhile to investigate other forms of bribery. For example, entrepreneurs may indirectly spend money on bribery through gifts or visits to bars. New data with other bribery measures would enable researchers to test the role of different forms of bribery.

Chapter 6

The relationship between bribery and entrepreneurial performance

6.1 Introduction¹⁵

Bribery has attracted the attention of scholars in various fields and is usually studied at either the country or the individual level (Luo, 2005). Depending on context, the word “bribery” can have different meanings (Bardhan, 1997). According to the World Bank (2000), bribery is the abuse of public office for private gain. In our research, it is the payment of cash by an organization with the aim of influencing the actions of a public official. Notwithstanding substantial progress, it is not yet fully understood how bribes are related to their performance (Hannafey, 2003; Martin et al., 2007). Exploring in more detail such a firm-specific rationale of bribery would be important because the firm is usually the unit that decides to bribe. Although the payment of bribes by firms has been acknowledged (Aidis & van Praag, 2007; Svensson, 2003), relatively

¹⁵ This chapter draws substantially on de Jong, G., Phan Anh.,T., and van Ees, H. (2012). Which entrepreneurs bribe and what do they get from it? Exploratory evidence from Vietnam. *Entrepreneurship Theory and Practice* 36(2), 323-345.

little is known about the relationship between bribery and entrepreneurship performance in general, and for transition economies such as Vietnam in particular. Our study aims to further this new field of research by addressing this research gap.

We draw on the extant literature about entrepreneurship in transition economies (for excellent reviews see Bruton et al., 2008; Chilesi, 2001). This literature highlights the importance of institutions to entrepreneurship because they provide guidance, allow for routines to develop and ultimately reduce the uncertainty of interaction (Baumol, 2005; Boettke & Coyne, 2009; North, 2005). Entrepreneurs in transition economies, however, face many difficulties that can be directly linked to deficiencies in their formal institutional structure such as legal activism and underdeveloped financial markets in starting up and running their businesses (Scase, 1997). Notwithstanding these obstacles, large parts of the new markets in transition countries developed spontaneously, through the initiatives of entrepreneurs. Smallbone & Welter (2001), for example, identify various forms of entrepreneurship under transition conditions including nomenclatural enterprises, self-employment and part-time businesses, small business ownership, and family businesses (Chrisman et al., 2008). Networking appears to be a common underlying principle for the various forms of entrepreneurship. In particular political connections are extremely important in transition economies (Peng & Zhou, 2005; Yiu & Lau, 2008). The incentive for entrepreneurs to establish government relationships ultimately arises from state control of key resources. In transition economies, the government controls bank loans, business formation, investment size and finance. Relationships with local government officials help to, e.g., mobilize resources, win orders and cope with the constraints imposed by bureaucratic structures, ultimately improving the performance of entrepreneurs. In this context, bribery can be

regarded as an investment that entrepreneurs need to make in order to operate successfully in an institutionally weak transition economy (Peng & Heath, 1996).

Although this suggests a positive relationship between bribery and entrepreneurship performance, there is a question to what extent such a positive relationship exists *ad infinitum*. Bribes, for example, may crowd out alternative investments and erode incentives for innovation or other activities such as training and marketing (Luo, 2005). The higher the bribes the more the disadvantages may contaminate the entrepreneurial organization. As the volume of bribes increases, the positive effect of the increased access to key resources may be offset by the inefficient allocation of resources and thus result in lower performance. This implies that bribery may have a diminishing return to entrepreneurship performance.

Hence, the purpose of this article is to contribute to a better understanding of the performance of entrepreneurs in transition economies by examining the relationship between bribery and entrepreneurship performance. In so doing, we offer the following contributions to the literature. First, ours is one of the few studies to assess bribery at the level of individual agents, i.e., entrepreneurs. With few exemptions, the existing literature is based on cross-country analyses, applying data on bribery derived from perception indices that are constructed by the assessment of foreign experts of overall bribery in a country, and explain bribery as a function of public policies and institutions. Aggregate data, however, offer limited opportunities to study the relationship between bribery and individuals and why firms facing similar institutions pay different amounts of bribes for the same services. We believe that micro-level empirical research helps to understand the likely heterogeneity of bribery within countries. Second, ours is one of the few studies that explicitly examined in detail the consequences of bribery for entrepreneurial performance. The dominant view of bribery put forward by, e.g., international institutes

considers bribery as an illegal act that seriously hampers the well-being of citizens. Existing research tends to “over-moralize” (Granovetter, 1985) bribery and, therefore, inadequately accounts for the potential benefits of bribery. Our work departed from the norm and, fully cognizant of the ethical issues involved, accepts that bribery in transition economies exists and that, at least at micro-level, bribery may have advantages and disadvantages. In summary, the present research not only shows that quantitative data of bribery at the level of individual entrepreneurs can be collected but also how variations in bribery explain variations in organizational performance. Hence, in comparison to existing studies, our research provides additional insights into the role of bribery at a different level of analysis using new, exploratory data.

6.2 Theoretical Background and Hypothesis

In our research, bribery is the payment of cash by an organization with the aim of influencing the actions of a public official. A distinction can be made between *administrative or bureaucratic corruption*, which refers to paying bribes for services concerning the implementation of regulations, and *state capture*, where firms try to influence the formulation of laws and other government policies to their own advantage through illicit or non-transparent means (Fries et al., 2003). The former includes regular payments of relatively small amounts of money by small and medium sized organizations to officials; and the latter relatively large amounts infrequently paid by in particular large organizations to political leaders. We focus on the first category as it establishes a direct link between the volume of the bribes and entrepreneurial returns. For instance, in the Vietnamese context, entrepreneurs must acquire the consent of officials in order

to start their business and to carry out their investment plans. A small amount of cash money may help to speed up the delaying bureaucratic process.

Bribery activities have a demand and a supply side and may involve public or private sector institutions (Cuervo-Cazurra, 2006). There is a substantial amount of research aimed at understanding the characteristics of countries or public institutions that affect the demands for bribes (Wu, 2005). From these studies we know that national levels of bribery relate to socio-economic factors (Getz & Volkema, 2001) and that bribery may hinder the entry of multinational enterprises (Uhlenbruck et al., 2006). This line of research also offers various explanations to explain bribe extraction by bureaucrats. For example, an often-used approach to explain the incidence of bribery is the so-called Klitgaard formula according to which bribery positively depends on the monopsony power of government officials and their bureaucratic discretion and negatively on their accountability (Klitgaard, 1988). An alternative explanation is the wage level in the public sector, that is, civil servants with low wages need to supplement their income with bribes to reach an acceptable income level (WorldBank, 2000).

Contrary to the aforementioned research, the focus of our paper is on the supply side of bribery and on the entrepreneur as the unit of analysis (Aidis & van Praag, 2007; Martin et al., 2007). The payment of bribes by entrepreneurs to government officials needs to be put into the perspective of the transition economy because the weak institutional environment promotes the need to establish and maintain political connections (Peng & Luo, 2000).

In order to explore the research question, we will analyze the positive effects of bribes and explain why bribes may be subject to diminishing returns. Diminishing returns means that at any single point in time, holding all other resources constant, the benefit-cost ratio diminishes with the size of the bribe. Diminishing returns offers a feasible perspective for entrepreneurs in

transition economies because they are usually very small firms and therefore their production capacity, level of innovation, labor input and capital stock is fixed, at least in the short run.

Bribery is among the few instruments that can be varied on the short term but given the peculiarities of entrepreneurs in transition economies is expected to have a diminishing marginal return.

We will argue that bribes facilitate entrepreneurship performance through higher levels of social capital. Building such social capital will have a positive effect on performance through at least two different interdependent channels of influence. First, bribes increase trust and establish a shared belief of reciprocity (Graeff, 2005). Through bribes entrepreneurs obtain favorable treatment that will increase their revenues because it enables them to win government projects or to obtain loans. Second, bribes are investments in networks that overcome liabilities of “newness” or “smallness” (Aldrich & Auster, 1986). Favorable relationships with public officials provide entrepreneurs legitimacy and thus decrease the risk for closure. These network effects may be subject to diminishing returns because of firm-specific congestion effects. All else equal the positive performance effect of an additional unit of bribery will decrease because particularly small and medium sized organizations cannot unlimitedly absorb new opportunities that bribes create (Yiu & Lau, 2008). In addition to the two network arguments, bribes can also be considered as “grease money”, meaning that paying bribes will speed up the bureaucratic processes (Kaufmann & Wei, 1999). It reduces delay in moving files in administrative offices and in getting ahead in slow-moving queues for government services as well as the relaxation of audits and inspections or advice on legal ways of reducing the regulatory burden. This will increase the efficiency of the entrepreneur and will be reflected in higher revenues.

There are also at least four rationales supporting the possibility that bribery may be an impediment to the revenues of entrepreneurs. The four rationales are arguments that the entrepreneur in a transition economy does not have control over the amount of bribes. Therefore, there is a tendency to bribe past the point where it is justified by the marginal benefits. First, bribes may increase rather than decrease the costs of red tape (Kaufmann & Wei, 1999). Entrepreneurs that pay bribes are more likely to be under bureaucratic control and are therefore more exposed to bribe demands (Svensson, 2003). These entrepreneurs will pay higher bribes in an effort to reduce the cost of red tape, but despite the higher bribes they will have more and more regulations and arbitrary behavior to deal with. Second, bribes may have crowding out effects and opportunity costs. They create disincentives for investments in innovation, which limits the potential scale and scope economies as financial and human resources are misallocated and wasted (Bardhan, 1997). Third, bribes breed bribes. In a way, this density-dependence effect is a reflection of economics' Law of Say in the bribery arena. By introducing a bribe, demand for additional bribes is boosted as officials are triggered to ask for more, being aware of the potential to regulate. As a consequence, the growth in bribes increases as the volume of bribes goes up, implying that bribes expand almost of its own accord. Because of the effect on the number of bribes, high volumes of bribes are expected to be less effective than small volumes. In a transition economy, a public official may try to extract as high a bribe as possible – subject to the virtually non-existent constraints that he/she might get caught – using all the power at their discretion for personal gain. Hence, entrepreneurs are either forced to pay bribes or to exit. Given that exiting is not a viable situation for entrepreneurs – due to high costs of starting up a new firm and because this new firm would face bribery again – entrepreneurs are easily trapped into vicious circles of ever-increasing bribes that absorb resources and limit revenues. Fourth, a

disadvantage of a network is that it increases liabilities of “staleness” and “sameness” (Starr & Bygrave, 1991). The former means that the entrepreneur will base guidelines and shortcuts on a relatively small sample of actors, which may impair the entrepreneur’s ability to bring a new perspective on business activities. The latter implies that entrepreneurs often favor familiar circles of network relationships. Uzzi (1997) argues that such embeddedness initially promotes economies of time, integrative agreements, and complex adaptation. However, these positive effects rise up to a threshold, after which embeddedness can derail economic performance by making firms vulnerable to exogenous shocks or insulating them from information that exists beyond their network. Consequently, putting strong and increasing, excessive emphasis on bribery may lead to liabilities of staleness and sameness, which may lower entrepreneurial performance.

In sum, we argue that in transition economies bribery can be revenue-enhancing but will be subject to diminishing returns. The arguments above lend support to the following hypothesis:

Hypothesis: There will be an inverted U-shape relationship between bribery and entrepreneurship performance.

6.3 Research Methods

6.3.1 Control variables

We entered three sets of controls when we tested the hypothesized relationships. The first set concerned the human capital of the entrepreneur (Wright et al., 2007). Entrepreneurs may increase their human capital through work experience, formal and informal education. The longer an entrepreneur has held a management position in the focal firm or elsewhere, the more work experience has been gained. This is important because, for example, entrepreneurs with a

great deal of experience tended to put more weight on the process of developing formal strategies than those who lack the relevant managerial work experience. The level of formal education was defined as having an official degree as a result of full-time or long-term training, and it measured an individual's knowledge or competence base. Entrepreneurs with higher levels of formal education were expected to generate a wider range of creative solutions when faced with complex problems. The level of informal training was determined by participation in management courses, including short-term ones (post-graduate education). These investments in human capital would also foster the productivity and cognitive skills of the entrepreneurs. The second set concerns firm characteristics, that is, firm age, firm size and the firm's type of ownership. The age of a firm may be a potential moderator of a firm's financial value as generated by managers (Jayaraman et al., 2000). Older firms may have lower performance levels than younger ones because of the continued use of outdated management and/or obsolete technology and their resistance to new approaches. Previous literature has documented firm size as an organizational attribute that significantly impacts firms' strategic orientation and performance (Peng & Luo, 2000). Specifically, large firms enjoy advantages such as low costs and higher returns due to greater access to the capital market and economies of scale. The ownership structure may influence firm performance. For instance, with substantial ownership of cash-flow rights, sole proprietorship provides the incentive and power to undertake actions that will benefit the owner at the expense of the firm's performance. In contrast, firms with shareholders are presumed to evaluate investments using market-value rules that maximize the value of the firm's residual cash flows (Anderson & Reeb, 2003). The third set concerns the industry context. Firms in new, expanding industries are expected to perform better than those operating in old, declining industries (in Vietnam, the new industries are predominantly service-

related, which are usually more relationship-intensive and rely more on external resources). Our final control variable was the level of competition. Some firms operated in emerging markets, that is, in new markets characterized by modest competition due to low demand and high uncertainty, since potential customers are often unfamiliar with the products and services offered (Eisenhardt & Schoonhoven, 1990). Others operated in growth markets that were characterized by severe competition due to high rates of entry.

6.3.2 Measurements

We measured entrepreneurship performance using the natural logarithm of the firm's total revenues in 2004 (in millions of Vietnamese dong). Total revenue is a commonly used item in firm surveys because, among other things, respondents have instant and accurate knowledge of their enterprise's achievements in terms of yearly revenues (Brush et al., 2008; Kuratko & Audretsch, 2009; Murphy et al., 1996). Bribery is measured by the amount of money that the enterprise pays to government officials to conduct their business (in millions of Vietnamese dong per year).¹⁶ Work experience was measured by the total number of years the respondent had worked for both the focal firm and at other firms (Hambrick & Fukutomi, 1991). Formal education was measured by a dummy variable that equaled 1 if a respondent had a university

¹⁶ The question was asked in Vietnamese. We used the usual forward and backward translation process to obtain the English version. The specific question was: "Monthly, how much must your enterprise pay "to lubricate" its business affairs". The expression "bôi trơn" in the original Vietnamese question literally means "to lubricate". This is a colloquial, synonym reference to money paid as bribes at government offices or administrative regulators. The closest English equivalent is "to grease someone's palm". In the survey, we explicitly defined "to lubricate" as money spend. Our measure does not include other forms of bribery such as gifts that may have monetary value as well. Our measure is very similar to the ones used by Transparency International and the World Bank. Also, we asked the respondents to indicate the amount in thousands of Vietnamese dong per month. For the regression analysis, we transformed this into millions of Vietnamese dong per year in order to maintain consistency with the scale for firm performance.

degree and 0 otherwise (Aidis & van Praag, 2007). Informal education was measured by the number of times a respondent had participated in management training courses (Aidis & van Praag, 2007). The age of the company was calculated by subtracting the year the firm was founded from the current year (Goll & Rasheed, 2005). Firm size was measured by the actual number of employees who in 2004 worked frequently for the company (Peng & Heath, 1996).¹⁷ Firm ownership was measured by a dummy variable that equals 1 if the firm was a sole proprietorship, and 0 otherwise (Gundry & Welsch, 2001).¹⁸ Our respondents operate in three main industries, namely services, trading and manufacturing. We constructed two dummy variables to account for industry differences, that is, one for services (that equals 1 if the firm operates in the service sector, and 0 otherwise) and one for trading (that equals 1 if the firm operates in the trading sector, and 0 otherwise). Manufacturing was considered as the base case in the model and was thus not included. Competition is the final control variable in our model. We use a perceptual measure because, among other things, it has been argued that small and medium-sized enterprises form their competitive maps based on perceived information and events (Daniels et al., 2002; Hodgkinson, 1997). In our survey we asked the respondent's opinion of the level of competition in their industry. We measured the level of (perceived)

¹⁷ As elsewhere, the number of employees in our Vietnamese organizations varied during the year. These entrepreneurs generally do not maintain employee records with, for example, employee contracts that would allow respondents to precisely determine start and end-dates for all their employees. However, given the relatively small scale of their companies, the respondents knew the number of employees with fixed appointments as well as the number of persons they employed during peaks. The former category consisted of persons with an oral agreement concerning working hours and salaries (written employee contracts are rare in Vietnam) and who worked for the company throughout the year. We used this information to measure the size of the company. Our respondents also indicated the number of seasonal employees. We decided not to use this information because the length of peak seasons was not known and typically varies for companies and industries.

¹⁸ The type of ownership in Vietnam is determined by the Central Institute for Economic Management (CIEM). The rights and obligations per ownership type are specified in the Enterprise Law (CIEM, 2005). The Enterprise Law specifies five main ownership types: sole proprietorship, Limited Liability Company, Shareholding Company, family business and collectives.

competition using a dummy variable that equals 1 if the respondent indicates that the company operates in a sector with a high or very high competition level, and 0 otherwise (Lang et al., 1997).

6.4 Empirical results

6.4.1 Methods

Means, standard deviations (SDs) and correlations are provided in Table 6.1. The yearly untransformed average volume of sales in the sample was VND 4,522 billion (US\$ 270,290, with the 2004 official exchange rate of VND 15,770 to US\$ 1). Of the observations, 75 percent (297 firms) reported that they did not pay bribes. According to our data, for the firms reporting positive bribes, the yearly average amount of bribes that firms paid was VND 60.2 million (US\$ 3,815). These are substantial amounts, on average corresponding to US\$ 109 per worker, or roughly about 10 percent of the total cost. Including firms reporting zero bribe payments, the average payment is VND 16.1 million (US\$ 1,024).

We obtain our findings from ordinary least square regression (OLS) estimates. In preparation for the regression analyses, we performed the regular tests to obtain reliable estimates. These tests reported satisfactory results, that is, there is no heteroskedasticity, multicollinearity or serial autocorrelation. Among other things, we tested for possible bias caused by collinearity among variables by calculating the variance inflation factor (VIF) for each of the regression coefficients. Calculations of VIF ranged from a low of 1.05 to a high of 7.64. The higher values were for bribery and the squared term of bribery but all were well below the cut-off figure of 10 recommended by Neter, Wasseman, & Kutner (1985).

Table 6.1. Correlations, Means and Standard Deviations (SD)

	M	SD	1	2	3	4	5	6	7	8	9	10
1. firm perf.	6.40	1.86										
2. bribery	16.15	77.40	0.15**									
3. work experience	8.05	6.55	0.01	-0.01								
4. formal education	0.22	0.41	0.25**	0.18**	-0.09							
5. informal educ.	1.00	2.58	0.21**	0.06	-0.01	0.11*						
6. firm age	7.76	7.72	-0.11*	-0.08	0.63**	-0.19**	0.06					
7. firm size	18.54	58.03	0.30**	0.17**	0.05	0.11**	0.18**	-0.03				
8. firm ownership	0.52	0.50	0.10*	-0.02*	-0.11*	-0.01	0.04	-0.09	-0.07			
9. services	0.16	0.36	-0.10	0.09	-0.08	0.05	0.07	-0.14**	0.17**	0.01		
10. trade	0.50	0.50	0.10	0.01	-0.14**	0.12*	0.04	-0.12*	-0.17**	0.04	-0.44**	
11. competition	0.67	0.47	0.13*	0.03	0.02	-0.02	-0.01	-0.06	-0.02	0.10*	0.00	0.05

M = mean

firm perf. = firm performance (lgsales)

informal educ. = informal education

* $p < 0.05$; ** $p < 0.01$, two-tailed test

6.4.2 Regression results

We continue with the analysis of our second research question. Results from the hierarchical OLS regression analyses are summarized in Table 6.2.

Table 6.2. Regression Results of the Effect of Bribery on Vietnamese Entrepreneurial Performance

	model 1	model 2	model 3
Constant	5.52 *** (0.25)	5.52 *** (0.25)	5.51 *** (0.25)
<i>control-entrepreneur</i>			
work experience	0.11 * (0.02)	0.10 * (0.02)	0.10 * (0.02)
formal education	0.19 *** (0.21)	0.18 *** (0.21)	0.18 *** (0.21)
informal education	0.15 *** (0.03)	0.15 *** (0.03)	0.14 *** (0.03)
<i>control-firm</i>			
firm age	-0.15 ** (0.01)	-0.14 ** (0.01)	-0.14 ** (0.01)
firm size	0.28 *** (0.00)	0.28 *** (0.00)	0.26 *** (0.00)
firm ownership	0.11 ** (0.17)	0.11 ** (0.17)	0.10 ** (0.17)
<i>control-industry</i>			
services	-0.016 *** (0.26)	-0.016 *** (0.26)	-0.018 *** (0.26)
trade	0.04 (0.19)	0.04 (0.19)	0.04 (0.19)
competition	0.11 ** (0.18)	0.11 ** (0.18)	0.12 ** (0.18)
independent variable bribery		0.06 (0.00)	0.34 *** (0.00)
independent variable - square term bribery			-0.29 ** (0.04)
<i>fitness indices</i>			
R ²	0.225	0.228	0.241
adj. R ²	0.207	0.209	0.219
F	12.453 ***	11.397 ***	11.027 ***
ΔR ²		0.003	0.013 **
FΔR ²		1.692	5.878

* $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$

Note: The entries in the table are standardized coefficients (s). The numbers in brackets are standard errors.

The various fit parameters show that our model increasingly fits the data better. The R-square index improves from 22.5 percent in Model 1 to 22.8 percent in Model 2 ($F = 1.692$, n.s.) and, subsequently, to 24.1 percent in Model 3 ($F = 5.878$, $p < .05$). Also, the estimates remain robust in terms of signs and significance levels. In Model 1, log revenues were regressed on control variables. In Model 2, bribery was added. Surprisingly, bribery had a positive but non-significant effect on performance ($\beta = .06$; n.s.). The bribery variable also explained only a marginal additional percentage of the variance beyond that explained by the control variables in Model 1. This indicated that in Vietnam there is no direct relationship between bribery and revenues. However, when we entered the squared bribery term in Model 3, we found that the bribery term was positive and significantly related to revenues ($\beta = .34$; $p < .01$), and the squared term negative and significantly related to revenues ($\beta = -.29$; $p < .05$). The size of the estimated coefficients for bribery is among the largest compared to the estimated coefficients of the other variables in the model indicating the relative importance of bribery for entrepreneurship performance. Taken together, these results confirmed our hypothesis that bribery has a diminishing return to entrepreneurial performance.¹⁹

Among the control variables, Table 2 showed that all entrepreneurial characteristics fostered entrepreneurship performance. Thus, work experience ($\beta = .10$; $p < .10$), formal education ($\beta = .18$; $p < .01$) and informal education ($\beta = .14$; $p < .01$) each significantly improve the revenues. These relationships were in line with our expectations. The results also validate the incorporation of our firm characteristics. Conforming to expectations, firm age was negatively ($\beta = -.14$; $p < .05$), and firm size ($\beta = .26$; $p < .01$) and sole proprietorship ($\beta = .10$; $p < .05$) were positively related to revenues. Finally, Table 2 reports that entrepreneurs who operate in service industries report mediocre performance more often than those who operate in other industries ($\beta = -.18$; $p < .01$), albeit that the dummy for trade reports has a positive but non-significant effect on revenues

¹⁹ Because the log function is monotonic, this result applies to the relationship between revenue and bribery as well.

($\beta = .04$; n.s.). A high level of competition as perceived by our interviewees increased performance as expected ($\beta = .12$; $p < .01$).

6.4.3 Robustness tests

We performed five additional tests of robustness. First, we replaced the missing value for a particular question by an estimated mean value of that question. By doing so, we were able to include all 606 observations, to compare the regression models and determine whether a sample bias existed. It turned out that the regression results were the same as for the conservative dataset. Additionally, a one-way ANOVA test was employed to compare the final sample and the cases deleted. No significant difference was found in terms of industry, size, bribery and revenues. Second, although all of our VIF values are well below the threshold value, in an additional test, we mean-centered bribery to minimize the threat of multicollinearity in equations where we had included the squared term of bribery. This did not affect the regression results. Third, we re-estimated our model for a sample without potential outliers. This also did not change the results. Fourth, we estimated our model for a sample with firms that pay positive bribes ($n = 106$). Accounting for outliers, the results from this test confirmed the non-monotonic relationship between bribery and firm performance in terms of revenues (log), by and large. Fifth, we also estimated a set of regression models with net profits as the dependent variable ($n = 363$, the number of observations is somewhat smaller due to missing values for net profits). Accounting for outliers, these results also showed a non-monotonic relationship between bribery and net profits. Separate tables for these robustness tests are available from the first author upon request.

6.4.4 Limitations

Our study is not without limitations. First, the use of cross-sectional data from Vietnamese entrepreneurs in the Mekong River Delta limits the generalizability of our results. Second, it is well known that cross-sectional databases prevent intertemporal, causal analysis of processes that

determine the outcomes observed with the use of a questionnaire. Third, a lack of other financial measurements for performance, such as market share or sales growth, limits us to using revenues as a performance measurement (with the exception of net profits, see the robustness tests for this). Within the entrepreneurship literature, entrepreneurial performance can be revenues but it can also be the launching of the venture, survival after a number of years, growth or value created. The sets of determinants for these alternative measures overlap but may not completely coincide. Similarly, our measure for bribery considers solely payment of cash. The interaction between an entrepreneur and a public official may also incorporate other forms of bribery. For example, entrepreneurs may indirectly spend money on bribery via, e.g., gifts or visits to bars. Our measure may understate the total amount of bribes paid when direct and indirect expenditures go together. New data with other bribery measures not only allows us to test the role of different forms of bribery but also whether our measure understates bribery and how this matters for the performance of entrepreneurs.

Fourth, the concept of diminishing returns applies to a single firm situation. We test our proposition in a cross-section sample of firms with the presumption that the firms are homogeneous. This presumption is a limitation and contributes to the exploratory nature of our research. We would like to mention that our approach is common practice in management research. Individual decisions and behavior such as the development of trust, for instance, are often tested with cross-sectional data (Chua et al., 2008; Welter & Smallbone, 2006). Nonetheless, more research including longitudinal data is needed to overcome this limitation.

Fifth, our results may be biased because our analysis was based on a non-random survey. A random dataset in Vietnam was difficult because a list of Vietnamese entrepreneurs in general as well as of those who bribe in particular was not available. Similarly, we used one respondent per company to obtain our information. Our assessment relies on the personal judgments of these individuals which is a recognized limitation of the study. Although management research often obtains reliable information from single respondents (Seppänen et al., 2007), bias may exist due

to person's vested interest in the practices being described. For larger organizations it is a question to what extent a single respondent represents the overall firm. Bias may also exist because we measure all our constructs from one survey (no secondary data were available to apply triangulation) and we did not use multiple questions to measure bribery. As a result, respondents may have reported too high or too low levels for bribery and revenues. Our focus, however, is not on levels of bribery and revenues per se, but rather on the correlates (Svensson, 2003). We believe that the data-collection strategy has minimized bias in the correlation between our key variables. The whole survey instrument was carefully piloted and built on existing surveys. The survey was implemented by academic researchers whom most entrepreneurs had confidence in – in Vietnam there is a deep-rooted distrust of the government – and so avoided the problem of suspicion by the entrepreneurs concerning the objective of the data-collection effort. Furthermore, the sequence of the questions first addressed the overall performance and the background of the entrepreneur. The bribery question was asked in the middle of the interview, by which time the interviewer had established some necessary credibility and trust. The questions were simple and we used different scales for revenues and bribery. Nonetheless, bias may exist and a replication of our study with, for example, more and other questions concerning bribery would allow for cross-validation of the non-monotonic relationship between bribery and revenues that is reported here.

6.5 Conclusions

6.5.1 Added value of the research

The role of entrepreneurs in economic theory and in Western economies is well established (Brush et al., 2008; Low, 2001). By the same token, we suggest that entrepreneurs play an important role in transition economies as well (Yamakawa et al., 2008). They create employment, productivity growth and innovation and produce important spillovers that affect regional economic growth. Until now, the performance of entrepreneurs in transition economies in general

and that in Vietnam in particular has largely remained unaddressed. Thus, our added value of this research is threefold. The first contribution concerns the role of bribery in transition economies. The results have implications for and must be taken into consideration in entrepreneurial decision making. Our emphasis on bribery complements recent performance literature that focused on human capital (van Praag & Versloot, 2007). Notwithstanding the importance of these and other performance antecedents, we argue that bribery is key for entrepreneurs who operate in a business environment with insufficient formal institutions, and that is dominated by a dual market structure (state versus non-state-owned enterprises) and powerful government officials who, among other things, preferentially distribute government resources. The precise form of the relationship between bribery and entrepreneurship performance is, however, an open question. Bribes enable entrepreneurs to use government resources, avoid red tape and thus foster revenues. We suggest, however, that bribes are subject to diminishing returns because high levels of bribes increasingly absorb the returns on entrepreneurial activities, and distort entrepreneurial spirit and behavior.

The second contribution concerns the empirical study. In the analysis of the relationship between bribery and entrepreneurship performance, we used unique firm level data. Firm-level data is needed not only to understand bribery and how it works for entrepreneurs, but also to move beyond the available country and individual-level studies. Our research was based on primary data collected from the owners directly responsible for their Vietnamese firms. The topic of research (i.e., bribery and revenues) and the research context (i.e., a transition economy) make large-scale empirical studies at firm level challenging. For example, there is no government database on bribing by firms. Hence, a database like ours is exceptional and shows that firm-level information on bribery can be collected by means of a carefully designed questionnaire and data-collection strategy (Svensson, 2003).

Our third contribution derives from the significant empirical findings of our work. Measuring bribery with quantitative indicators is one thing, explaining variations in bribes is another. To the

best of our knowledge, ours is one of the first that has explored the relationship in transition economies between bribery and entrepreneurship performance in terms of revenues. We found support for a diminishing return of bribery to revenues, while controlling for a substantial number of entrepreneurial, firm and industrial characteristics. By doing so, we eliminated potentially spurious relationships as well as alternative explanations for entrepreneurship performance.

6.5.2 Future research

Given the increasing focus on bribery and entrepreneurship performance in transition economies, our study can only be a first step. We would like to mention that Vietnam shares many similarities with its neighbors (Taiwan, Singapore, Hong Kong and South Korea) as well as China. For more than a hundred years, China occupied Vietnam. The countries share the cultural inheritance of Confucianism and have similarities in market structures, state ideologies, reform processes, institutional frameworks and entrepreneurial vividness (Heberer, 2003). A next logical step would be to test our model in China and, in so doing, determine whether the role of bribery in entrepreneurship performance in these two countries is similar as well. In a similar vein, new data from entrepreneurs in Central and Eastern European countries or advanced nation states allow testing of the general validity of our findings in other transition economies and whether our perspectives hold for modern democracies as well. Although bribery is omnipresent in transition states it is acknowledged that it also exists in Western economies (Wu, 2005). An international firm-level dataset enables us to investigate the combined effect of macro- and micro-level variables on e.g. the incidence of bribery payouts by entrepreneurs and, as such, to determine how the role of bribery for entrepreneurs varies across institutional frameworks. New data collection would also allow confirmation of the validity of our results by utilizing financial and non-financial performance indices other than revenues or net profits as well as alternative measures for bribery.

Our results only suggest that bribery may have a non-monotonic relationship with entrepreneurial revenues, while no evidence of causality can actually be provided. Although we provide theoretical arguments that bribery impacts revenues, one could also argue that revenues determine bribery. For example, some of the low-revenue firms may have small transactions that call for small bribes to local officials. Bribery in Vietnam, however, involves much asymmetric information. Government officials usually do not know the size of revenues of a particular entrepreneur either because the entrepreneur will not provide credible information or the entrepreneur lacks this information (a new entrepreneur does not yet know his revenues and costs). Government officials may use firm size as a proxy for revenues because large firms will likely earn large revenues. In that case, however, the reversed causality will likely run via firm size and may bias results for large companies (albeit those large firms will also have more opportunities to impose political power or ignore bribery demands). Our Vietnamese respondents manage and own small and very small organizations, and size has been included as a control variable in our model. Furthermore, the Durbin-Wu-Hausman or augmented regression test reports that our OLS estimates are consistent, and therefore that endogeneity with respect to revenues and sales in our sample is of less concern (Davidson & MacKinnon, 1993). Nonetheless, additional longitudinal or lagged data will be needed to test alternatives and address the causality issue in more detail.

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Samenvatting (summary in Dutch)

Dit proefschrift bestudeert de oorzaken en gevolgen van corruptie voor bedrijven in transitie economieën, meer specifiek voor ondernemers in Vietnam. Een transitie economie bevindt zich in de overgang tussen twee economische systemen. In het geval van Vietnam is het de overgang van een centraal geleide economie naar een markteconomie. Corruptie kent vele vormen. In dit proefschrift gaat het over omkoping: het (regelmatig) betalen van kleine geldbedragen aan overheidsambtenaren om iets geregeld te krijgen zoals het (sneller) verkrijgen van een vergunning of lagere belastingen.

Omkoping is als fenomeen niet nieuw. In toenemende mate, is het een belangrijk onderwerp van overheidsbeleid over de hele wereld. Ook het academische onderzoek naar omkoping is toegenomen. Inmiddels zijn er gevestigde theorieën die het ontstaan en verdwijnen van corruptie kunnen verklaren (zie Bardhan, 1997 voor een uitgebreid literatuuroverzicht). In de recente literatuur wordt getracht omkoping te verklaren vanuit een breed maatschappelijke perspectief. Zo stellen sociologen bijvoorbeeld dat de nationale cultuur een voedingsbodem voor omkoping kan zijn. Economen wijzen het ontbreken van transparante instituties of de slechte kwaliteit van overheidsdiensten als hoofdoorzaken van omkoping aan (Treisman, 2000; Wu, 2009).

Inmiddels zijn er relatief veel (empirische) studies verschenen die omkoping verklaren met behulp van kenmerken van landen. Een bedrijfsmatig perspectief op omkoping echter, is nog onderbelicht. Een dergelijke micro-economische benadering kan interessant zijn, vanwege de aandacht voor de oorzaken en gevolgen van omkoping op bedrijfsniveau. Is er bijvoorbeeld een relatie tussen omkoping en ondernemingsactiviteiten? Betalen sommige ondernemers eerder steekpenningen dan anderen en zo ja, waarom? Bestaat er een verband tussen de hoogte van de omkoping en de prestatie van de onderneming? Het antwoord op deze vragen kan een bijdrage leveren aan de recente literatuur en een nieuw perspectief

bieden op omkoping als aanvulling op de bestaande landenstudies. Bovendien is een studie vanuit een micro perspectief over de relatie tussen het gedrag van bedrijven en omkoping vooral relevant voor economieën in transitie vanwege de complexe relaties tussen ondernemersactiviteiten en grootschalige institutionele veranderingen die in deze landen plaats vinden.

Dit proefschrift bestaat uit zes hoofdstukken: Naast de inleiding, een literatuuronderzoek, een hoofdstuk dat de onderzoekscontext en twee bedrijfsenquêtes beschrijft, en drie empirische studies. Hoofdstuk 2 biedt een overzicht van de empirische literatuur over corruptie, waarbij lacunes worden geconstateerd, die de grondslag vormen voor het empirische onderzoek in de hoofdstukken 4, 5 en 6. Hoofdstuk 2 richt zich vooral op onderzoek naar corruptie op bedrijfsniveau, dat wil zeggen, omkoping vanuit het perspectief van een organisatie. De literatuurstudie toont aan dat er nagenoeg geen onderzoek is naar corruptie op bedrijfsniveau, terwijl een bedrijfsmatige analyse van omkoping noodzakelijk is voor een begrip van deze vorm van corruptie in transitie economieën: het zijn vooral bedrijven die zich met omkoping in laten.

In hoofdstuk 3 worden zowel de onderzoekscontext (Vietnam) als de data die voor dit promotieonderzoek is verzameld in detail beschreven. Hoofdstuk 4 onderzoekt welke bedrijven in een transitie economie geneigd zijn steekpenningen te betalen aan ambtenaren, en welke dat niet geneigd zijn te doen. Dit hoofdstuk is een aanvulling op het kleine aantal studies dat de effecten van bedrijfs- en omgevingskenmerken op de kans op omkoping hebben onderzocht (Chen et al., 2008; Clarke & Xu, 2004). Er wordt onderzocht op welke manier interne en externe druk de kans op omkoping kunnen verklaren. De stelling is dat hoewel alle bedrijven in een transitie economie in meer of mindere mate onder druk staan om steekpenningen te betalen, er verschillen zijn in de manier waarop zij op interne of externe druk reageren. Op basis van een logistische analyse van het gedrag van 352 Vietnamese

ondernemers kan worden geconcludeerd dat de kans op omkoping kan worden verklaard uit bedrijfs- en omgevingskenmerken. Meer in het bijzonder geldt dat de kans dat een bedrijf in een transitie economie steekpenningen aan een overheidsambtenaar betaalt, wordt beïnvloed door (a) bedrijfskenmerken (vooral de leeftijd en de omvang van de onderneming) en (b) door variaties in de bedrijfsomgeving (en dan vooral de mate van de gepercipieerde concurrentie en de kwaliteit van de overheidsdiensten).

In hoofdstuk 5 wordt de samenhang bestudeerd tussen persoonlijke relaties (netwerken) en de kans op omkoping door Vietnamese ondernemers. Meer in het bijzonder wordt bestudeerd hoe verschillende netwerken (bedrijven kunnen een netwerk met lokale ambtenaren of ambtenaren op nationaal niveau hebben) en de diversiteit van dergelijke netwerken de kans op omkoping vergroten. Op basis van de analyse van hoofdstuk 5 kan worden geconcludeerd dat persoonlijke banden met overheidsambtenaren de kans op omkoping beïnvloeden. Dergelijke banden versterken exclusiviteit, bevorderen loyaliteit binnen de groep en het onderlinge vertrouwen, en vergroten zo de verleiding en de gelegenheid voor illegale praktijken zoals omkoping. Het blijkt dat banden met lokale ambtenaren de kans op omkoping vergroten, terwijl banden met rijksambtenaren deze kans verkleinen.

Hoofdstuk 6, tenslotte, onderzoekt de relatie tussen de omvang van het bedrag aan steekpenningen en bedrijfsprestaties. De stelling is dat enerzijds omkoping bedrijfsprestaties kan bevorderen omdat het ondernemers in staat stelt om een vertrouwensband met ambtenaren op te bouwen en zo een netwerk van informele relaties met de bijbehorende voordelen te ontwikkelen (bijvoorbeeld voorkeursbehandelingen, geen nadelige effecten voor nieuwkomers op de markt, legitimiteit). Anderzijds kleven er ook nadelen aan omkoping, zoals hogere bedrijfskosten, een inefficiënte verdeling van financiële middelen, vicieuze cirkels van alsmaar toenemende corruptie, en de negatieve effecten van onderlinge

verwevenheid. Op basis van de analyse van hoofdstuk 6 kan worden geconcludeerd dat ook omkoping onderhevig is aan afnemende meeropbrengsten: een beetje omkoping leidt tot een verbetering van de bedrijfsprestaties. Naarmate de bedragen voor omkoping groter worden, neemt de bedrijfsprestaties minder toe en uiteindelijk af. Er bestaat dientengevolge een niet-lineair verband tussen de omvang van de omkoping en de bedrijfsprestaties. In een transitie economie kunnen relatief kleine omkoopsommen de bedrijfsprestaties bevorderen, terwijl grotere omkoopsommen een negatief effect hebben.

Samenvattend, dit proefschrift levert drie bijdragen aan de bestaande literatuur. Samen geven deze drie onderzoeksresultaten een beter begrip van de bedrijfsspecifieke oorzaken en gevolgen van omkoping door ondernemers in transitie economieën. Op deze manier geeft dit onderzoek een zinvolle aanvulling op de verschillende landenstudies en sector analyses van corruptie. Aangetoond is het belang van een beter begrip van bedrijfsspecifieke dimensies van omkoping, enerzijds ter ondersteuning van de ontwikkeling van beleid dat tot doel heeft om omkoping in transitie economieën te reduceren, en anderzijds om managers te helpen adequaat om te gaan met corruptie.

